

STN

Connecting via Winsock to STN

Current generic formula  
Incl 9/19/2007

Welcome to STN International! Enter x:x

LOGINID:SSPTAMLL1621

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

\* \* \* \* \* Welcome to STN International \* \* \* \* \*

NEWS 1 Web Page for STN Seminar Schedule - N. America  
NEWS 2 JUL 02 LMEDLINE coverage updated  
NEWS 3 JUL 02 SCISEARCH enhanced with complete author names  
NEWS 4 JUL 02 CHEMCATS accession numbers revised  
NEWS 5 JUL 02 CA/CAPplus enhanced with utility model patents from China  
NEWS 6 JUL 16 CAPplus enhanced with French and German abstracts  
NEWS 7 JUL 18 CA/CAPplus patent coverage enhanced  
NEWS 8 JUL 26 USPATFULL/USPAT2 enhanced with IPC reclassification  
NEWS 9 JUL 30 USGENE now available on STN  
NEWS 10 AUG 06 CAS REGISTRY enhanced with new experimental property tags  
NEWS 11 AUG 06 BEILSTEIN updated with new compounds  
NEWS 12 AUG 06 FSTA enhanced with new thesaurus edition  
NEWS 13 AUG 13 CA/CAPplus enhanced with additional kind codes for granted patents  
NEWS 14 AUG 20 CA/CAPplus enhanced with CAS indexing in pre-1907 records  
NEWS 15 AUG 27 Full-text patent databases enhanced with predefined patent family display formats from INPADOCDB  
NEWS 16 AUG 27 USPATOLD now available on STN  
NEWS 17 AUG 28 CAS REGISTRY enhanced with additional experimental spectral property data  
NEWS 18 SEP 07 STN AnaVist, Version 2.0, now available with Derwent World Patents Index  
NEWS 19 SEP 13 FORIS renamed to SOFIS  
NEWS 20 SEP 13 INPADOCDB enhanced with monthly SDI frequency  
NEWS 21 SEP 17 CA/CAPplus enhanced with printed CA page images from 1967-1998  
NEWS 22 SEP 17 CAPplus coverage extended to include traditional medicine patents  
  
NEWS EXPRESS 19 SEPTEMBER 2007: CURRENT WINDOWS VERSION IS V8.2, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 19 SEPTEMBER 2007.  
  
NEWS HOURS STN Operating Hours Plus Help Desk Availability  
NEWS LOGIN Welcome Banner and News Items  
NEWS IPC8 For general information regarding STN implementation of IPC 8

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer

agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

\* \* \* \* \* STN Columbus \* \* \* \* \*

FILE 'HOME' ENTERED AT 21:58:13 ON 20 SEP 2007

=> file reg

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.21

0.21

FILE 'REGISTRY' ENTERED AT 21:58:34 ON 20 SEP 2007

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2007 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 19 SEP 2007 HIGHEST RN 947584-60-3

DICTIONARY FILE UPDATES: 19 SEP 2007 HIGHEST RN 947584-60-3

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 29, 2007

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

=>

Uploading C:\Program Files\Stnexp\Queries\2007 cases\10522986\generic.str

L1 STRUCTURE UPLOADED

=> d l1

L1 HAS NO ANSWERS

L1 STR

=> fil stng

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

260.25

929.76

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

CA SUBSCRIBER PRICE

-35.10

-35.10

FILE 'STNGUIDE' ENTERED AT 22:04:42 ON 20 SEP 2007

USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT

COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

FILE CONTAINS CURRENT INFORMATION.

LAST RELOADED: Sep 14, 2007 (20070914/UP).

=> d his

(FILE 'HOME' ENTERED AT 21:58:13 ON 20 SEP 2007)

FILE 'REGISTRY' ENTERED AT 21:58:34 ON 20 SEP 2007

L1 STRUCTURE UPLOADED

L2 15 S L1

L3 274 S L1 SSS FULL

L4 STRUCTURE UPLOADED

L5 1 S L4

L6 3 S L4 SSS FULL

L7 0 S L3 SUB=L6 FULL

L8 STRUCTURE UPLOADED

L9 0 S L8

L10 2 S L8 SSS FULL

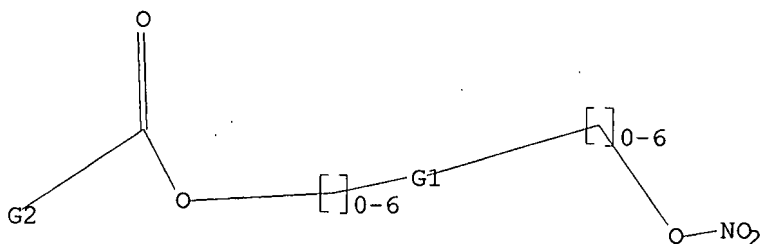
L11 0 S L3 SUB=L10 FULL

L12 0 S L10 SUB=L3 FULL

FILE 'HCAPLUS' ENTERED AT 22:02:54 ON 20 SEP 2007

L13 45 S L3

FILE 'STNGUIDE' ENTERED AT 22:04:42 ON 20 SEP 2007



G1 O, S

G2 A, Cb, Cy, Hy, Ak

Structure attributes must be viewed using STN Express query preparation.

=> s 11

SAMPLE SEARCH INITIATED 21:58:59 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 464 TO ITERATE

100.0% PROCESSED 464 ITERATIONS

15 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*

BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 7988 TO 10572

PROJECTED ANSWERS: 68 TO 532

L2 15 SEA SSS SAM L1

=> d 12 ide 1-15

L2 ANSWER 1 OF 15 REGISTRY COPYRIGHT 2007 ACS on STN

RN 946406-48-0 REGISTRY

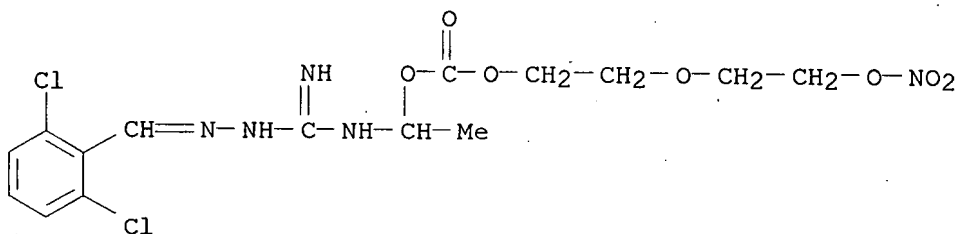
ED Entered STN: 07 Sep 2007

CN INDEX NAME NOT YET ASSIGNED

MF C15 H19 Cl2 N5 O7

SR CA

LC STN Files: CA, CAPLUS

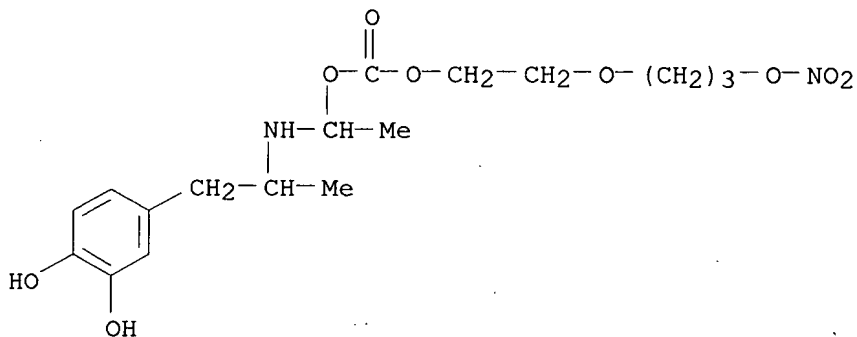


\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

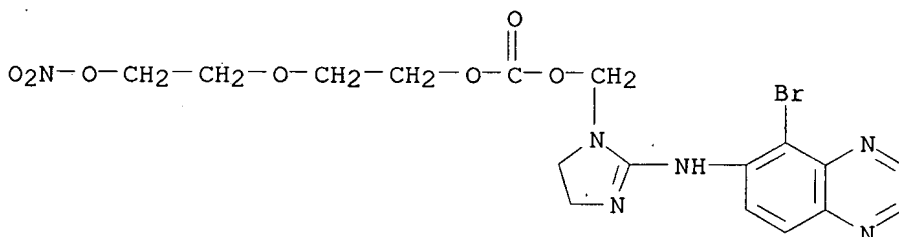
L2 ANSWER 2 OF 15 REGISTRY COPYRIGHT 2007 ACS on STN  
 RN 946406-25-3 REGISTRY  
 ED Entered STN: 07 Sep 2007  
 CN INDEX NAME NOT YET ASSIGNED  
 MF C17 H26 N2 O9  
 SR CA  
 LC STN Files: CA, CAPLUS



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L2 ANSWER 3 OF 15 REGISTRY COPYRIGHT 2007 ACS on STN  
 RN 946393-63-1 REGISTRY  
 ED Entered STN: 07 Sep 2007  
 CN INDEX NAME NOT YET ASSIGNED  
 MF C17 H19 Br N6 O7  
 SR CA  
 LC STN Files: CA, CAPLUS

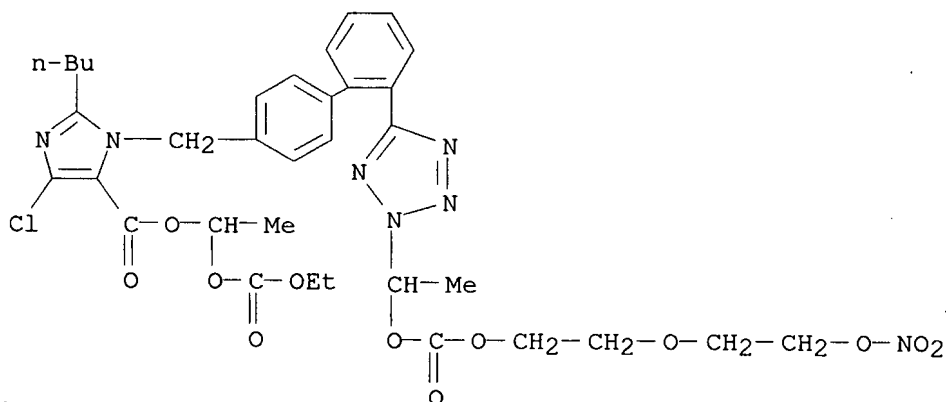


\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L2 ANSWER 4 OF 15 REGISTRY COPYRIGHT 2007 ACS on STN  
 RN 902126-92-5 REGISTRY

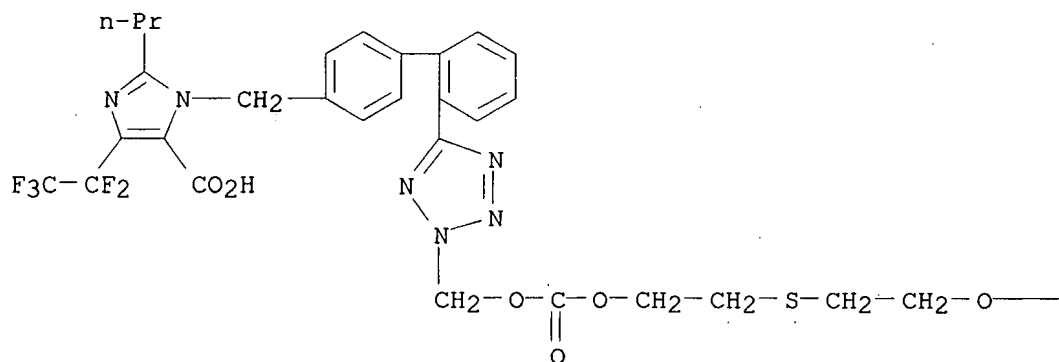
ED Entered STN: 17 Aug 2006  
 CN 1H-Imidazole-5-carboxylic acid, 2-butyl-4-chloro-1-[[2'-[2-[1-[[[2-[2-(nitrooxy)ethoxy]ethoxy]carbonyl]oxy]ethyl]-2H-tetrazol-5-yl][1,1'-biphenyl]-4-yl]methyl]-, 1-[(ethoxycarbonyl)oxy]ethyl ester (CA INDEX NAME)  
 MF C34 H40 Cl N7 O12  
 SR CA  
 LC STN Files: CA, CAPLUS



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L2 ANSWER 5 OF 15 REGISTRY COPYRIGHT 2007 ACS on STN.  
 RN 902126-67-4 REGISTRY  
 ED Entered STN: 17 Aug 2006  
 CN 1H-Imidazole-5-carboxylic acid, 1-[[2'-[2-[[[[2-[2-(nitrooxy)ethyl]thio]ethoxy]carbonyl]oxy]methyl]-2H-tetrazol-5-yl][1,1'-biphenyl]-4-yl]methyl]-4-(pentafluoroethyl)-2-propyl- (9CI) (CA INDEX NAME)  
 MF C29 H28 F5 N7 O8 S  
 SR CA  
 LC STN Files: CA, CAPLUS

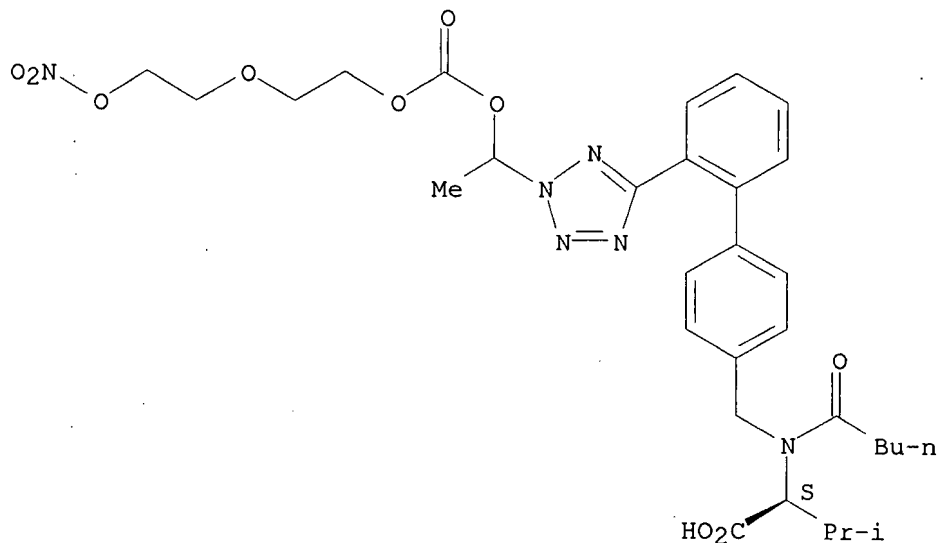
—NO<sub>2</sub>

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L2 ANSWER 6 OF 15 REGISTRY COPYRIGHT 2007 ACS on STN  
 RN 902123-62-0 REGISTRY  
 ED Entered STN: 17 Aug 2006  
 CN L-Valine, N-[[2'-[2-[1-[[[2-[2-(nitrooxy)ethoxy]ethoxy]carbonyl]oxy]ethyl]-2H-tetrazol-5-yl][1,1'-biphenyl]-4-yl]methyl]-N-(1-oxopentyl)- (CA INDEX NAME)  
 FS STEREOSEARCH  
 MF C31 H40 N6 O10  
 SR CA  
 LC STN Files: CA, CAPLUS

Absolute stereochemistry.



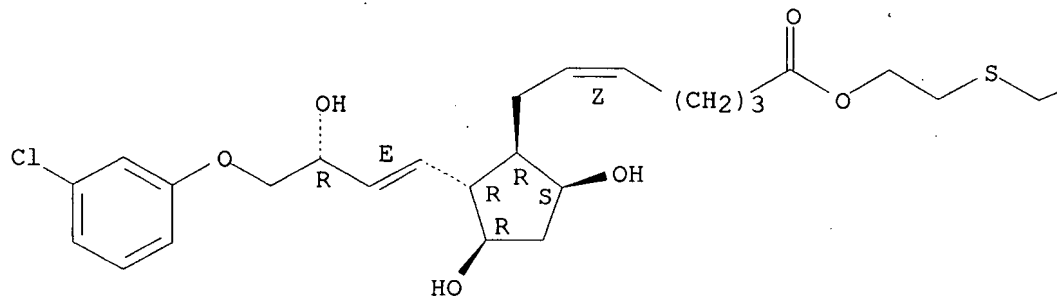
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

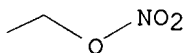
L2 ANSWER 7 OF 15 REGISTRY COPYRIGHT 2007 ACS on STN  
RN 860005-60-3 REGISTRY  
ED Entered STN: 12 Aug 2005  
CN 5-Heptenoic acid, 7-[(1R,2R,3R,5S)-2-[(1E,3R)-4-(3-chlorophenoxy)-3-hydroxy-1-butenyl]-3,5-dihydroxycyclopentyl]-, 2-[[2-(nitrooxy)ethyl]thio]ethyl ester, (5Z)- (9CI) (CA INDEX NAME)  
FS STEREOSEARCH  
MF C26 H36 Cl N O9 S  
SR CA  
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.  
Double bond geometry as shown.

PAGE 1-A





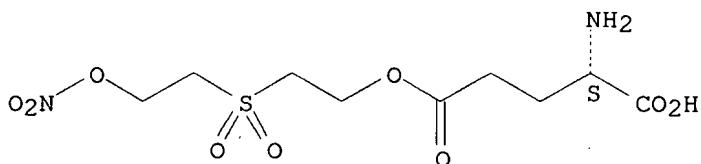


\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L2 ANSWER 8 OF 15 REGISTRY COPYRIGHT 2007 ACS on STN  
RN 849138-32-5 REGISTRY  
ED Entered STN: 25 Apr 2005  
CN L-Glutamic acid, 5-[2-[[2-(nitrooxy)ethyl]sulfonyl]ethyl] ester,  
monohydrochloride (9CI) (CA INDEX NAME)  
FS STEREOSEARCH  
MF C9 H16 N2 O9 S . Cl H  
SR CA  
LC STN Files: CA, CAPLUS, CASREACT, USPATFULL  
CRN (849323-92-8)

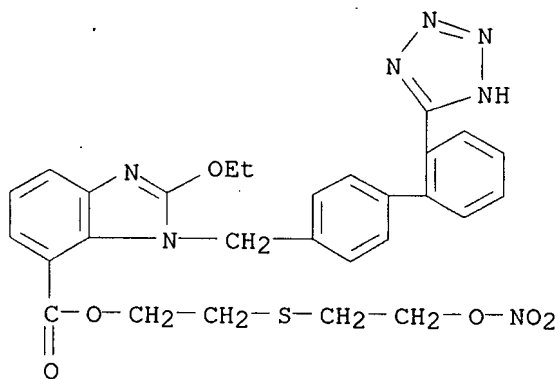
Absolute stereochemistry.



● HCl

1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L2 ANSWER 9 OF 15 REGISTRY COPYRIGHT 2007 ACS on STN  
RN 838877-30-8 REGISTRY  
ED Entered STN: 28 Feb 2005  
CN 1H-Benzimidazole-7-carboxylic acid, 2-ethoxy-1-[[2'-(1H-tetrazol-5-yl)[1,1'-biphenyl]-4-yl]methyl]-, 2-[[2-(nitrooxy)ethyl]thio]ethyl ester (9CI) (CA INDEX NAME)  
MF C28 H27 N7 O6 S  
SR CA  
LC STN Files: CA, CAPLUS, USPATFULL

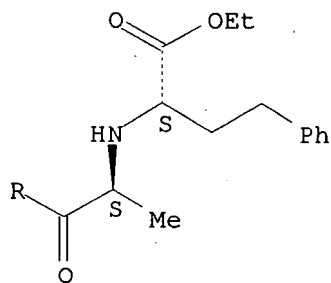
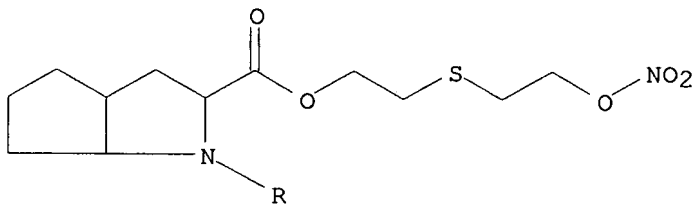


\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L2 ANSWER 10 OF 15 REGISTRY COPYRIGHT 2007 ACS on STN  
RN 812681-87-1 REGISTRY  
ED Entered STN: 13 Jan 2005  
CN Cyclopenta[b]pyrrole-2-carboxylic acid, 1-[(2S)-2-[[[(1S)-1-(ethoxycarbonyl)-3-phenylpropyl]amino]-1-oxopropyl]octahydro-, 2-[[2-(nitrooxy)ethyl]thio]ethyl ester (9CI) (CA INDEX NAME)  
FS STEREOSEARCH  
MF C27 H39 N3 O8 S  
SR CA  
LC STN Files: CA, CAPLUS, USPAT2, USPATFULL

Absolute stereochemistry.

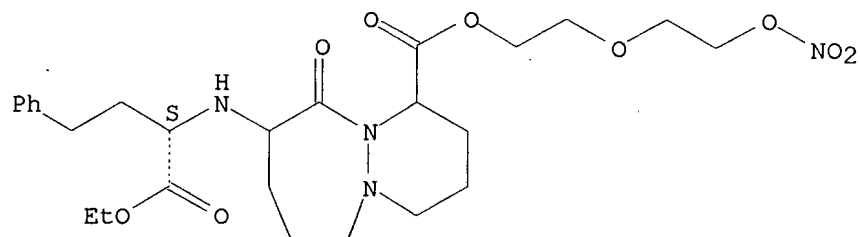


\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L2 ANSWER 11 OF 15 REGISTRY COPYRIGHT 2007 ACS on STN  
RN 811787-67-4 REGISTRY  
ED Entered STN: 12 Jan 2005  
CN 6H-Pyridazino[1,2-a][1,2]diazepine-1-carboxylic acid, 9-[[[(1S)-1-(ethoxycarbonyl)-3-phenylpropyl]amino]octahydro-10-oxo-, 2-[2-(nitrooxy)ethoxy]ethyl ester (9CI) (CA INDEX NAME)  
FS STEREOSEARCH  
MF C26 H38 N4 O9  
SR CA  
LC STN Files: CA, CAPLUS, USPAT2, USPATFULL

Absolute stereochemistry.

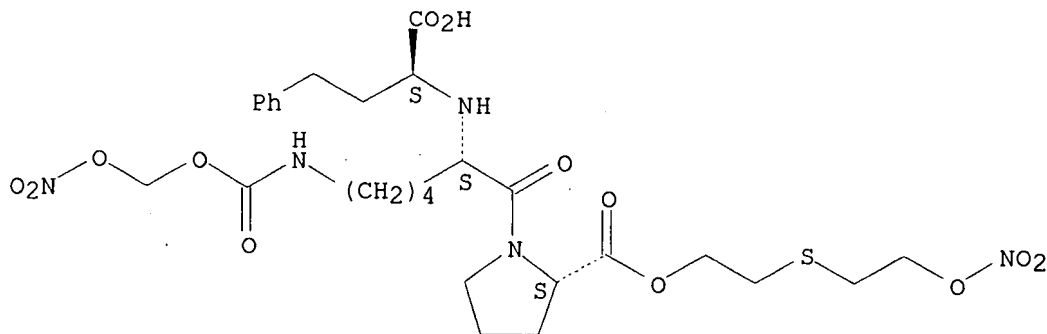


\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L2 ANSWER 12 OF 15 REGISTRY COPYRIGHT 2007 ACS on STN  
RN 811787-21-0 REGISTRY  
ED Entered STN: 12 Jan 2005  
CN L-Proline, N2-[(1S)-1-carboxy-3-phenylpropyl]-N6-[[[(nitrooxy)methoxy]carbonyl]-L-lysyl-, 2-[2-[[2-(nitrooxy)ethyl]thio]ethyl] ester (9CI) (CA INDEX NAME)  
FS STEREOSEARCH  
MF C27 H39 N5 O13 S  
SR CA  
LC STN Files: CA, CAPLUS, USPAT2, USPATFULL

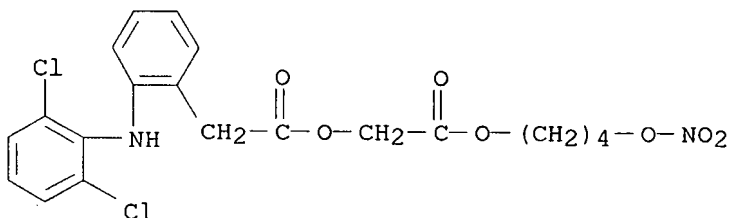
Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

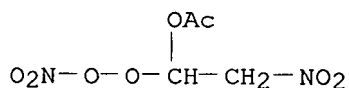
L2 ANSWER 13 OF 15 REGISTRY COPYRIGHT 2007 ACS on STN  
RN 183195-07-5 REGISTRY  
ED Entered STN: 20 Nov 1996  
CN Benzeneacetic acid, 2-[(2,6-dichlorophenyl)amino]-, 2-[4-(nitrooxy)butoxy]-  
2-oxoethyl ester (9CI) (CA INDEX NAME)  
MF C20 H20 Cl2 N2 O7  
SR CA  
LC STN Files: CA, CAPLUS, USPAT2, USPATFULL



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

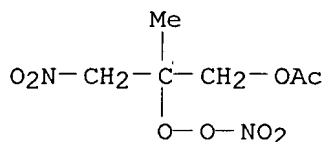
L2 ANSWER 14 OF 15 REGISTRY COPYRIGHT 2007 ACS on STN  
RN 87055-56-9 REGISTRY  
ED Entered STN: 16 Nov 1984  
CN Peroxynitric acid, 1-(acetyloxy)-2-nitroethyl ester (9CI) (CA INDEX NAME)  
MF C4 H6 N2 O8  
LC STN Files: CA, CAPLUS, USPATFULL



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L2 ANSWER 15 OF 15 REGISTRY COPYRIGHT 2007 ACS on STN  
RN 39128-73-9 REGISTRY  
ED Entered STN: 16 Nov 1984  
CN Peroxynitric acid, 1-[(acetyloxy)methyl]-1-methyl-2-nitroethyl ester (9CI)  
(CA INDEX NAME)  
MF C6 H10 N2 O8  
LC STN Files: CA, CAPLUS, IFICDB, IFIPAT, IFIUDB, USPATFULL, USPATOLD



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

2 REFERENCES IN FILE CA (1907 TO DATE)  
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> d his

(FILE 'HOME' ENTERED AT 21:58:13 ON 20 SEP 2007)

FILE 'REGISTRY' ENTERED AT 21:58:34 ON 20 SEP 2007

L1 STRUCTURE UPLOADED  
L2 15 S L1

=> s l1 sss full

FULL SEARCH INITIATED 21:59:40 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 9261 TO ITERATE

100.0% PROCESSED 9261 ITERATIONS  
SEARCH TIME: 00.00.02

274 ANSWERS

L3 274 SEA SSS FUL L1

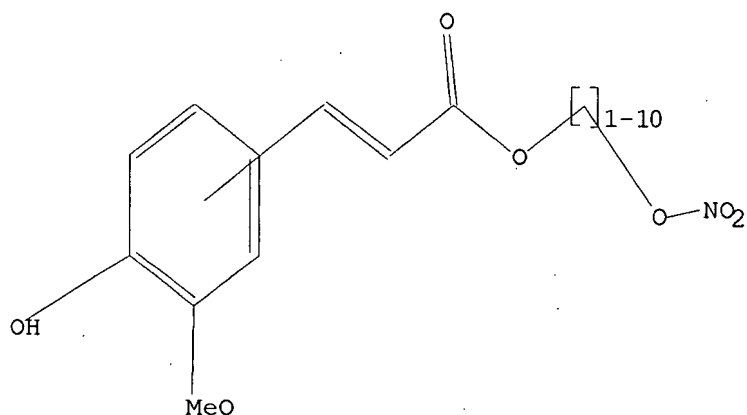
=>

Uploading C:\Program Files\Stnexp\Queries\2007 cases\10522986\species but  
generic.str

L4 STRUCTURE UPLOADED

=> d l4

L4 HAS NO ANSWERS  
L4 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l4

SAMPLE SEARCH INITIATED 22:00:21 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 12 TO ITERATE

100.0% PROCESSED 12 ITERATIONS  
SEARCH TIME: 00.00.01

1 ANSWERS

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED ITERATIONS: 33 TO 447  
PROJECTED ANSWERS: 1 TO 80

L5 1 SEA SSS SAM L4

=> s l4 sss full

FULL SEARCH INITIATED 22:00:28 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 253 TO ITERATE

100.0% PROCESSED 253 ITERATIONS  
SEARCH TIME: 00.00.01

3 ANSWERS

L6 3 SEA SSS FUL L4

=> d his

(FILE 'HOME' ENTERED AT 21:58:13 ON 20 SEP 2007)

FILE 'REGISTRY' ENTERED AT 21:58:34 ON 20 SEP 2007

L1 STRUCTURE UPLOADED  
L2 15 S L1  
L3 274 S L1 SSS FULL  
L4 STRUCTURE UPLOADED  
L5 1 S L4  
L6 3 S L4 SSS FULL

=> s l3 subset=l6

ENTER SUBSET SEARCH SCOPE - SAMPLE, FULL, RANGE, OR (END):full

10/522986 NITROOXYALKYL SUBTD ESTERS

FULL SUBSET SEARCH INITIATED 22:01:03 FILE 'REGISTRY'  
FULL SUBSET SCREEN SEARCH COMPLETED - 3 TO ITERATE

100.0% PROCESSED 3 ITERATIONS 0 ANSWERS  
SEARCH TIME: 00.00.01

L7 0 SEA SUB=L6 SSS FUL L1

=>

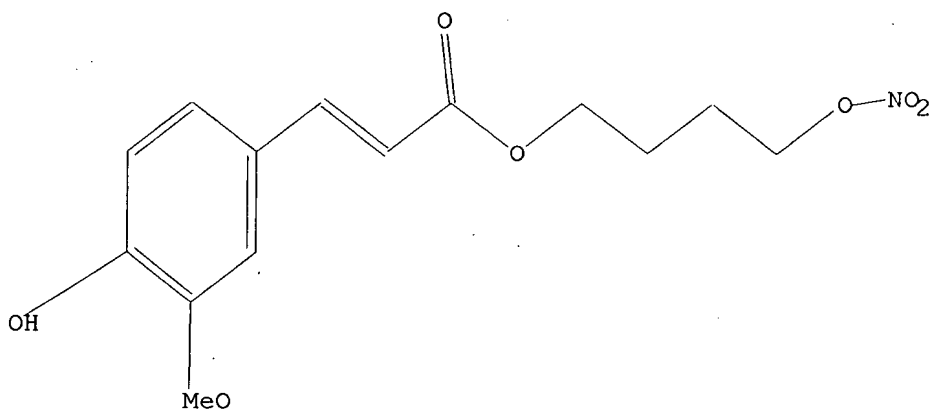
Uploading C:\Program Files\Stnexp\Queries\2007 cases\10522986\electd species  
Example2B.str

L8 STRUCTURE UPLOADED

=> d 18

L8 HAS NO ANSWERS

L8 STR



Structure attributes must be viewed using STN Express query preparation.

=> s 18

SAMPLE SEARCH INITIATED 22:01:44 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 12 TO ITERATE

100.0% PROCESSED 12 ITERATIONS 0 ANSWERS  
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED ITERATIONS: 33 TO 447  
PROJECTED ANSWERS: 0 TO 0

L9 0 SEA SSS SAM L8

=> s 18 sss full

FULL SEARCH INITIATED 22:01:51 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 275 TO ITERATE

100.0% PROCESSED 275 ITERATIONS 2 ANSWERS

10/522986 NITROOXYALKYL SUBTD ESTERS

SEARCH TIME: 00.00.01

L10 2 SEA SSS FUL L8

=> s l3 subset=l10

ENTER SUBSET SEARCH SCOPE - SAMPLE, FULL, RANGE, OR (END):full

FULL SUBSET SEARCH INITIATED 22:02:11 FILE 'REGISTRY'

FULL SUBSET SCREEN SEARCH COMPLETED - 2 TO ITERATE

100.0% PROCESSED 2 ITERATIONS

0 ANSWERS

SEARCH TIME: 00.00.01

L11 0 SEA SUB=L10 SSS FUL L1

=> s l10 subset=l3

ENTER SUBSET SEARCH SCOPE - SAMPLE, FULL, RANGE, OR (END):full

FULL SUBSET SEARCH INITIATED 22:02:36 FILE 'REGISTRY'

FULL SUBSET SCREEN SEARCH COMPLETED - 7 TO ITERATE

100.0% PROCESSED 7 ITERATIONS

0 ANSWERS

SEARCH TIME: 00.00.01

L12 0 SEA SUB=L3 SSS FUL L8

=> d his

(FILE 'HOME' ENTERED AT 21:58:13 ON 20 SEP 2007)

FILE 'REGISTRY' ENTERED AT 21:58:34 ON 20 SEP 2007

L1	STRUCTURE UPLOADED
L2	15 S L1
L3	274 S L1 SSS FULL
L4	STRUCTURE UPLOADED
L5	1 S L4
L6	3 S L4 SSS FULL
L7	0 S L3 SUB=L6 FULL
L8	STRUCTURE UPLOADED
L9	0 S L8
L10	2 S L8 SSS FULL
L11	0 S L3 SUB=L10 FULL
L12	0 S L10 SUB=L3 FULL

=> file hcaplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

669.30

669.51

FILE 'HCAPLUS' ENTERED AT 22:02:54 ON 20 SEP 2007

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L13 45 L3

=&gt; d l13 1-45 ibib abs

L13 ANSWER 1 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2007:907062 HCAPLUS

DOCUMENT NUMBER: 147:277605

TITLE: Preparation of nitrooxy derivatives as  $\alpha$ 2 adrenergic receptor agonists

INVENTOR(S): Almirante, Nicoletta; Monopoli, Angela; Biondi, Stefano; Ongini, Ennio

PATENT ASSIGNEE(S): Nicox S.A., Fr.

SOURCE: PCT Int. Appl., 146pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

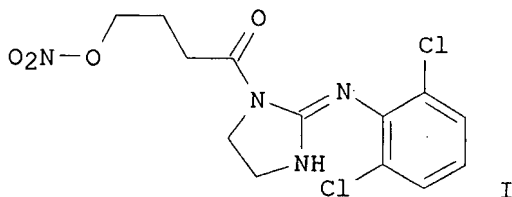
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007090733	A1	20070816	WO 2007-EP50627	20070123
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW			
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			

PRIORITY APPLN. INFO.:

US 2006-765159P P 20060206

GI



AB The  $\alpha 2$  adrenergic agonist nitrooxy derivs. of formula A-(XO-ONO<sub>2</sub>)<sub>s</sub> and enantiomers and diastereoisomers and pharmaceutically acceptable salts thereof, wherein: s is an integer equal to 1, 2 or 3; wherein A is a precursor of an  $\alpha 2$  adrenergic receptor agonists having wider pharmacol. activity and enhanced tolerability. For example, reaction of clonidine hydrochloride with pentafluorophenyl 4-(nitrooxy)butanoate gave I in 94% yield. They can be employed for treating cardiovascular disease, in particular systemic hypertension, renal and chronic liver diseases, inflammatory processes and metabolic syndromes.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 2 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2007:906184 HCAPLUS

DOCUMENT NUMBER: 147:277601

TITLE: Preparation of nitrooxy-comprising derivatives of apraclonidine and brimonidine as  $\alpha 2$ -adrenergic receptor agonists

INVENTOR(S): Benedini, Francesca; Impagnatiello, Francesco; Biondi, Stefano; Ongini, Ennio; Chong, Wesley Kwan Mung

PATENT ASSIGNEE(S): Nicox S.A., Fr.; Pfizer Inc.

SOURCE: PCT Int. Appl., 54pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

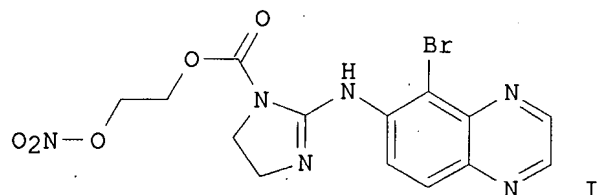
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007090793	A1	20070816	WO 2007-EP51017	20070202
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				

PRIORITY APPLN. INFO.:  
GI

US 2006-765166P

P 20060206



AB The present invention relates to  $\alpha$ 2-adrenergic receptor agonist nitrooxy derivs. of formula A-X1-Y-ONO2 [wherein A = apraclonidiny1 or brimonidiny1; X1 = -CO-, -CO2-, -CH(Me)OCO2- or -CH2OCO2-; Y = a bivalent radical] having improved pharmacol. activity and enhanced tolerability. For example, starting from the reaction of 2-bromoethanol with AgNO3, and followed by reaction with triphosgene and brimonidine, gave I in 34% yield. They can be employed for the treatment of ocular diseases, in particular high intraocular pressure and glaucoma (no data).

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 3 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2007:461436 HCAPLUS

DOCUMENT NUMBER: 146:462508

TITLE: Preparation of nitrooxy peptidomimetic renin inhibitors for treating cardiovascular, renal and chronic liver diseases, inflammations and metabolic syndrome

INVENTOR(S): Almirante, Nicoletta; Monopoli, Angela; Ongini, Ennio

PATENT ASSIGNEE(S): Nicox S.A., Fr.

SOURCE: PCT Int. Appl., 73pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007045551	A2	20070426	WO 2006-EP66952	20061002
WO 2007045551	A3	20070607		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW			
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA			

PRIORITY APPLN. INFO.: US 2005-727550P P 20051018

OTHER SOURCE(S): MARPAT 146:462508

GI

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB The invention is related to the preparation of renin inhibitors A-(XO-ONO<sub>2</sub>)<sub>n</sub> [I; n = 1-2; A = II, III, etc.; N1 = O, OH; N2 = O, NH, N2'; N2' = NH<sub>2</sub>, OH; with the proviso that at least one of N1 and N2 is a group O or NH able to bind to XO; XO = X1-Y; X1 = CO, COO; Y = bivalent radical selected from alkylene, cycloalkylene, phenylene, (CR<sub>4</sub>R<sub>6</sub>)<sub>m</sub>-Y<sub>2</sub>-(CR<sub>5</sub>R<sub>7</sub>)<sub>q</sub>, etc.; m = 0-10; q = 1-10; R<sub>4</sub>-R<sub>7</sub> = independently H, alkyl; Y<sub>2</sub> = pyridinylene, piperazinylene, pyrimidinylene, pyridazinylene, etc.] having wider pharmacol. activity and enhanced tolerability. Thus, reacting aliskiren (III; N1 = OH; N2 = NH<sub>2</sub>) with 4-(nitrooxy)butanoic acid pentafluorophenyl ester in the presence of TEA and DMAP in DMF gave IV in 50% yield. Peptidomimetics I are useful for treating or preventing congestive heart failure, coronary diseases, cardiac insufficiency, left ventricular dysfunction and hypertrophy, cardiac fibrosis, myocardial ischemia, stroke, atherosclerosis, restenosis post angioplasty, renal insufficiency, renal ischemia, renal failure, renal fibrosis, glomerulonephritis, renal colic, ocular and pulmonary hypertension, glaucoma, hypertension, diabetic complications such as nephropathy, vasculopathy and neuropathy, peripheral vascular diseases, liver fibrosis, portal hypertension, metabolic syndrome, erectile dysfunction, complications after vascular or cardiac surgery, complications of treatment with immunosuppressive agents after organ transplantation, hyperaldosteronism, lung fibrosis, scleroderma, anxiety, cognitive disorders (no data).

L13 ANSWER 4 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2007:259757 HCAPLUS

DOCUMENT NUMBER: 146:317107

TITLE: Preparation of steroid nitrooxy derivatives for use in anti-inflammatory pharmaceutical compositions

INVENTOR(S): Benedini, Francesca; Ongini, Ennio; Guglietta, Antonio; Palop, Daniel; Princep, Marta

PATENT ASSIGNEE(S): Nicox S.A., Fr.; Ferrer Internacional S.A.

SOURCE: PCT Int. Appl., 96pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007025632	A2	20070308	WO 2006-EP7746	20060804
WO 2007025632	A3	20070419		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW			
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,			

GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,  
 KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA

PRIORITY APPLN. INFO.:

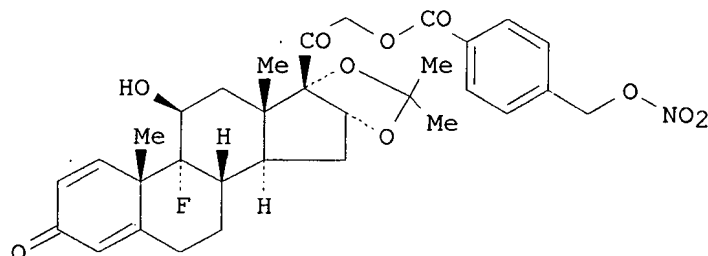
EP 2005-19155

A 20050902

OTHER SOURCE(S):

MARPAT 146:317107

GI



I

AB Steroid nitrooxy derivs., such as R-X-ONO<sub>2</sub> [R = sterol moiety, such as triamcinolone acetonide, prednisolone 17-ethylcarbonate or betamethasone 17-valerate; X = linking group consisting of carboxy, carbonate, alkylene, alkenylene and/or phenylene subunits], were prepared for use in topical pharmaceutical formulations for treating skin or mucosal membrane diseases and disorders, such as eczema, erythema, papulation, scaling, erosion, oozing, crusting, pruritis, inflammation, epidermalysis bullosa, erythema, warts, diaper rash, jock itch, ruber lichen planus. These new steroids nitrooxy derivs. have an improved pharmacol. activity and enhanced local tolerability. Thus, steroid nitrooxy derivative I was prepared by an esterification reaction of triamcinolone acetonide with 4-(nitrooxymethyl)benzoic acid using DMAP and EDAC in CH<sub>2</sub>Cl<sub>2</sub>.

L13 ANSWER 5 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2007:118117 HCAPLUS

DOCUMENT NUMBER: 146:190547

TITLE: Pharmaceutical formulation of nitrooxy derivatives of NSAIDS

INVENTOR(S): Gasslander, Ulla; Holmberg, Christina

PATENT ASSIGNEE(S): Nicox S.A., Fr.

SOURCE: PCT Int. Appl., 26pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007012539	A2	20070201	WO 2006-EP63672	20060629
WO 2007012539	A3	20070419		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU,

SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG,  
 US, UZ, VC, VN, ZA, ZM, ZW  
 RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,  
 IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,  
 CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,  
 GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,  
 KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA

## PRIORITY APPLN. INFO.:

EP 2005-106854

A 20050726

AB The present invention relates to a pharmaceutical formulation comprising:  
 NO-releasing NSAID(s), 1 or more surfactants, a carbonyl scavenger compound,  
 and optionally an oil or semi-solid fat and/ or a short-chain alc. Thus,  
 a capsule contained PABA 3m Poloxamer-407 225, and a nitrooxy derivative of  
 NSAIDS 375 mg.

L13 ANSWER 6 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2007:14512 HCAPLUS

DOCUMENT NUMBER: 146:121748

TITLE: Prostaglandin derivatives

INVENTOR(S): Benedini, Francesca; Chiroli, Valerio; Chong, Wesley  
 Kwan Mung; Krauss, Achim; Niesman, Michael Ross;  
 Ongini, Ennio

PATENT ASSIGNEE(S): Pfizer Inc., USA; Nicox S.A.

SOURCE: PCT Int. Appl., 64pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

## PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007000642	A1	20070104	WO 2006-IB1728	20060619
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW			
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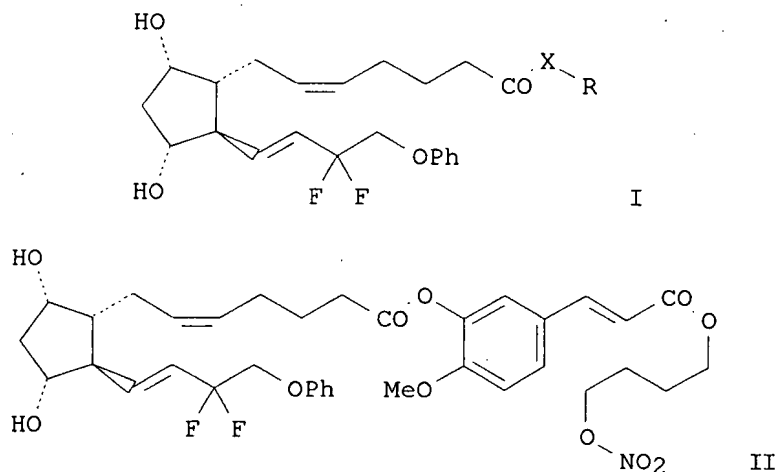
## PRIORITY APPLN. INFO.:

US 2005-696354P

P 20050629

OTHER SOURCE(S): MARPAT 146:121748

GI



AB Nitrooxy derivs. of prostaglandin esters and amides, such as I [X = NH, O, S; R = X1-ONO2; X1 = linking group which may be composed of alkylene, phenylene, alkenylene and/or amino acid residue with amide, ester, amino, thioether and/or ether linkage], with improved pharmacol. activity and enhanced tolerability were prepared for use in ophthalmic compns. for the treatment of glaucoma and ocular hypertension. Thus, prostaglandin ester II was prepared from tafluprost acid I (X = O, R = H), ferulic acid, and Br-(CH2)4ONO2.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 7 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2006:768702 HCAPLUS

DOCUMENT NUMBER: 145:188887

TITLE: Preparation of nitrooxy sartan derivatives as angiotensin ii receptor blockers for the treatment of cardiovascular and inflammatory diseases

INVENTOR(S): Almirante, Nicoletta; Nicotra, Alessia; Ongini, Ennio

PATENT ASSIGNEE(S): Nicox S.A., Fr.

SOURCE: PCT Int. Appl., 346pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006079610	A1	20060803	WO 2006-EP50348	20060120
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,			

CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,  
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,  
KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.:

US 2005-647791P

P 20050131

OTHER SOURCE(S): MARPAT 145:188887

GI

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB Title compds. I [W = CO, CO<sub>2</sub>, CH(Me)OCO<sub>2</sub>, CH<sub>2</sub>OCO<sub>2</sub>; Y = bivalent radicals selected from (un)substituted alkylene, cycloalkylene, aryl, etc.; R<sub>1</sub> = substituted heterocycle], and their pharmaceutical salts, are prepared as angiotensin II receptor blockers (no data). Thus, e.g., II was prepared by esterification of 4-bromobutanoic acid with pentafluorophenol followed by oxidation to form 4-(nitrooxy)butanoic acid pentafluorophenyl ester which was reacted with 2-butyl-4-chloro-1-[[2'-(1H-tetrazol-5-yl)[1,1'-biphenyl]-4-yl]methyl]-5-[(3-nitrooxypropyl)carbonyloxy]methyl-1H-imidazole (preparation given). I can be employed for treatment of cardiovascular and renal diseases and inflammatory processes.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 8 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2006:14820 HCAPLUS

DOCUMENT NUMBER: 144:260959

TITLE: Identification of a trace colored impurity in drug substance by preparative liquid chromatography and mass spectrometry

AUTHOR(S): Wang, Peng; Shi, Y.-J.; Helmy, Roy; Reamer, Robert; Vailaya, Anant

CORPORATE SOURCE: Analytical Research, Merck Research Laboratories, Rahway, NJ, 07065, USA

SOURCE: Rapid Communications in Mass Spectrometry (2005), 19(24), 3749-3754

CODEN: RCMSEF; ISSN: 0951-4198

PUBLISHER: John Wiley &amp; Sons Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

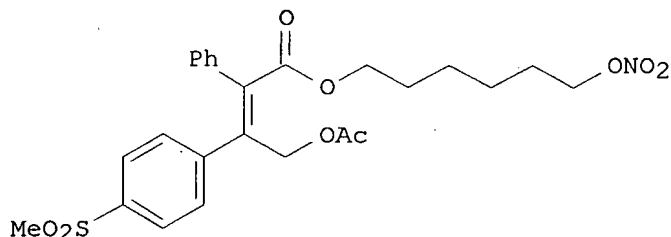
AB 6-(Nitrooxy)hexyl-(2z)-4-(acetyloxy)-3-[4-(methylsulfonyl)phenyl]-2-phenylbut-2-enoate (enoate 1) was investigated as a novel therapy for pain relief. In a recent manufacturing run at the pilot plant scale, the enoate drug

substance was found to have a yellowish color not observed previously. An unknown impurity at trace level was detected by high-performance liquid chromatog. (HPLC) anal. and found to be the primary cause for the color of the drug substance. The colored impurity was enriched by preparative HPLC and structurally elucidated by liquid chromatog./tandem mass spectrometry (LC/MS/MS). It was found that the colored impurity was derived from the product of oxidative dimerization of rofecoxib, an impurity present in the enoic acid intermediate. It was further revealed by the photodiode array and LC/MS/MS data that the colored impurity exists in the drug substance as a pair of double-bond isomers with one isomer at majority. These findings were also confirmed by synthesizing the colored impurity through the proposed pathway.

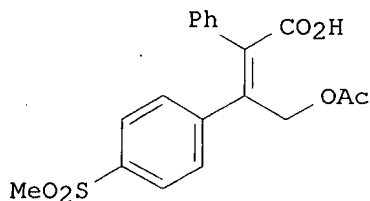


REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 9 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 2005:1315893 HCAPLUS  
DOCUMENT NUMBER: 144:212486  
TITLE: Synthesis of a NO-Releasing Prodrug of Rofecoxib  
AUTHOR(S): Engelhardt, F. Conrad; Shi, Yao-Jun; Cowden, Cameron J.; Conlon, David A.; Pipik, Brenda; Zhou, George; McNamara, James M.; Dolling, Ulf-H.  
CORPORATE SOURCE: Department of Process Research, Merck Company, Rahway, NJ, 07065-0900, USA  
SOURCE: Journal of Organic Chemistry (2006), 71(2), 480-491  
CODEN: JOCEAH; ISSN: 0022-3263  
PUBLISHER: American Chemical Society  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 144:212486  
GI



I



III

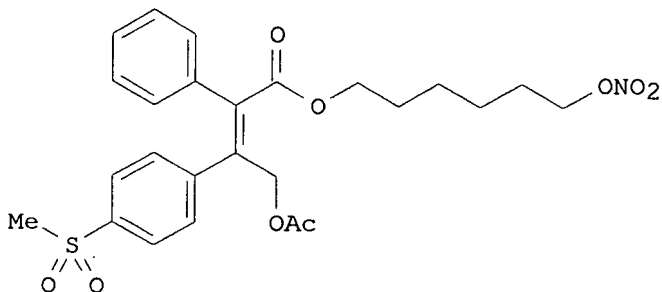
AB A newly developed synthesis of a NO-releasing prodrug of rofecoxib is described. The highly productive process consists of five chemical steps and produces prodrug I in an overall 64% yield from com. available 3-phenyl-2-propyn-1-ol (II). The synthesis is highlighted by the carbometalation reaction of propargyl alc. II to generate the tetrasubstituted olefin core, sulfone acid III. Addnl., two alternate end-game strategies to prepare NO-COXIB I from this intermediate were explored and developed: (1) a convergent synthesis where a bromonitrate side chain is introduced in one step and (2) a two-step sequence that first installs the requisite six-carbon ester side chain followed by chemoselective nitration.

REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 10 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 2005:963804 HCAPLUS  
DOCUMENT NUMBER: 143:266677

TITLE: Process for making nitric oxide releasing prodrugs of  
 diaryl-2-(5H)-furanones as cyclooxygenase-2 inhibitors  
 INVENTOR(S): Shi, Yao-Jun; Engelhardt, F. Conrad; Cowden, Cameron  
 John; Conlon, David A.; Pipik, Brenda  
 PATENT ASSIGNEE(S): USA  
 SOURCE: U.S. Pat. Appl. Publ., 16 pp.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005192346	A1	20050901	US 2005-66676	20050225
PRIORITY APPLN. INFO.:			US 2004-549126P	P 20040301
OTHER SOURCE(S):		CASREACT 143:266677; MARPAT 143:266677		
GI				



I

AB The invention encompasses a novel process for making prodrugs of cyclooxygenase-2 selective inhibitors that convert in vivo to diaryl-2-(5H)-furanones and also liberate nitric oxide in vivo. As such, the compds. may be co-dosed with low-dose aspirin to treat chronic cyclooxygenase-2 mediated diseases or conditions, effectively reduce the risk of thrombotic cardiovascular events and potentially renal side effects and at the same time reduce the risk of GI ulceration or bleeding. I was prepared starting from 3-phenyl-2-propyn-1-ol and 4-thioanisole magnesium chloride, acetylation, and the intermediate converted to the carboxylic acid, the thio group oxidized to the methylsulfonyl derivative and reaction with 6-bromohexyl nitrate to give I.

L13 ANSWER 11 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 2005:696865 HCAPLUS  
 DOCUMENT NUMBER: 143:193802  
 TITLE: Preparation of nitric oxide releasing prodrugs of  
 diaryl-2(5H)-furanones as cyclooxygenase-2 inhibitors  
 INVENTOR(S): Berthelette, Carl; Li, Lianhai; Beaulieu, Christian;  
 Wang, Zhaoyin; Sturino, Claudio F.  
 PATENT ASSIGNEE(S): Merck Frosst Canada & Co., Can.  
 SOURCE: PCT Int. Appl., 41 pp.  
 CODEN: PIXXD2

DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005070874	A1	20050804	WO 2005-CA84	20050125
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2005206229	A1	20050804	AU 2005-206229	20050125
CA 2554333	A1	20050804	CA 2005-2554333	20050125
EP 1711457	A1	20061018	EP 2005-706414	20050125
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, IS				
CN 1914151	A	20070214	CN 2005-80003240	20050125
JP 2007520484	T	20070726	JP 2006-549815	20050125
IN 2006DN04343	A	20070713	IN 2006-DN4343	20060727
PRIORITY APPLN. INFO.:			US 2004-540101P	P 20040127
			WO 2005-CA84	W 20050125
OTHER SOURCE(S):			CASREACT 143:193802; MARPAT 143:193802	
GI				

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB Title compds. I [n = 1-6; R1 = SO<sub>2</sub>CH<sub>3</sub>, SO<sub>2</sub>NH<sub>2</sub>; R2-3 = H, halo, alkoxy, etc.; R4 = alkyl, Ph, etc.] are prepared For instance, II is prepared in several steps from 4-(4-(methanesulfonyl)phenyl)-3-phenyl-5H-furan-2-one and hex-5-en-1-ol. I are nitric oxide-releasing prodrugs of diaryl-2(5H)-furanones useful in the treatment of cyclooxygenase-2 mediated diseases [no data]. I may also be used as a combination therapy with low-dose aspirin to treat chronic cyclooxygenase-2 mediated diseases or conditions while also reducing the risk of thrombotic cardiovascular events.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 12 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2005:673257 HCAPLUS

DOCUMENT NUMBER: 143:153219

TITLE: Preparation of prostaglandin nitrooxy derivatives for the treatment of glaucoma

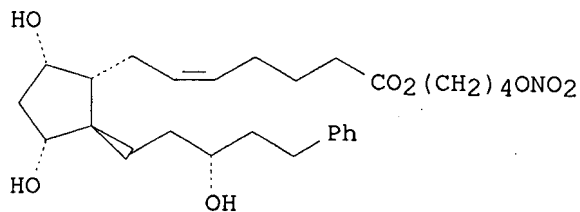
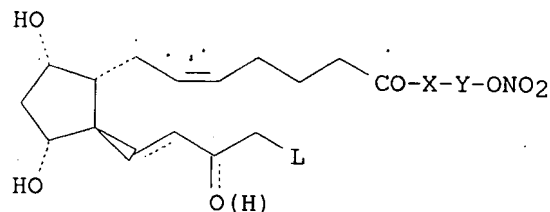
INVENTOR(S): Ongini, Ennio; Benedini, Francesca; Chiroli, Valerio; Del Soldato, Piero

PATENT ASSIGNEE(S): Nicox, S. A., Fr.

## 10/522986 NITROOXYALKYL SUBTD ESTERS

SOURCE: PCT Int. Appl., 82 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005068421	A1	20050728	WO 2004-EP14820	20041227
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, VZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2004313688	A1	20050728	AU 2004-313688	20041227
CA 2551409	A1	20050728	CA 2004-2551409	20041227
EP 1704141	A1	20060927	EP 2004-804405	20041227
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, BA, HR, IS, YU				
CN 1906159	A	20070131	CN 2004-80039805	20041227
BR 2004018245	A	20070417	BR 2004-18245	20041227
JP 2007518716	T	20070712	JP 2006-546105	20041227
US 2005272743	A1	20051208	US 2005-29698	20050105
IN 2006DN03240	A	20070824	IN 2006-DN3240	20060606
MX 2006PA07678	A	20060901	MX 2006-PA7678	20060704
NO 2006003567	A	20060907	NO 2006-3567	20060807
PRIORITY APPLN. INFO.:			EP 2004-100001	A 20040105
			WO 2004-EP14820	W 20041227
OTHER SOURCE(S):		MARPAT 143:153219		
GI				



AB Prostaglandin nitrooxy derivs. of formula I [L = benzyl, 3-(trifluoromethyl)phenoxy, 3-chlorophenoxy, (CH<sub>2</sub>)<sub>5</sub>Me; X = O, S, NH; Y = alkylene, cycloalkylene, phenylene, etc.] are prepared which have improved pharmacol. activity and enhanced tolerability. They can be employed for the treatment of glaucoma and ocular hypertension. Thus, II was prepared from 4-bromobutyl nitrate (preparation given) and latanoprost acid. The EC<sub>50</sub> of II was 2.4  $\mu$ M for cGMP formation in rat pheochromocytoma cells. Ophthalmic compns. containing I are described.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 13 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2005:588522 HCAPLUS

DOCUMENT NUMBER: 143:120530

TITLE: Nitric oxide-releasing pyruvate compounds, compositions and methods for treating cardiovascular and other diseases

INVENTOR(S): Garvey, David S.; Fang, Xinqin; Subhash, Khanapure P.; Ramani, Ranatunga R.; Shiow-Jyi, Wey

PATENT ASSIGNEE(S): Nitromed, Inc., USA

SOURCE: PCT Int. Appl., 82 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005060603	A2	20050707	WO 2004-US41069	20041210
WO 2005060603	A3	20051201		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
AU 2004305016	A1	20050707	AU 2004-305016	20041210
CA 2549412	A1	20050707	CA 2004-2549412	20041210
EP 1692107	A2	20060823	EP 2004-813393	20041210
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, IS			
PRIORITY APPLN. INFO.:			US 2003-528184P	P 20031210
			WO 2004-US41069	W 20041210

OTHER SOURCE(S): MARPAT 143:120530

AB The invention describes novel pyruvate compds. comprising at least one nitric oxide-releasing group and pharmaceutically acceptable salts thereof, and compns. and kits comprising at least one of these pyruvate compds., and, optionally, at least one nitric oxide donor and/or at least one therapeutic agent. The therapeutic agent is, e.g., an aldosterone antagonist,  $\alpha$ -adrenoceptor antagonist, an angiotensin II antagonist,

an ACE inhibitor, an antidiabetic, an antihyperlipidemic agent, an antioxidant, an antithrombotic, a vasodilator, a  $\beta$ -adrenoceptor antagonist, a calcium channel blocker, a digitalis, a diuretic, etc. The invention also provides methods for treating cardiovascular diseases, renovascular diseases, diabetes, diseases resulting from oxidative stress, endothelial dysfunctions, diseases caused by endothelial dysfunctions, cirrhosis, pre-eclampsia, osteoporosis, nephropathy, reperfusion injury following ischemia, and/or preserving tissues, organs, organ parts and/or limbs using these compns. The nitric oxide releasing group is preferably a nitro group, a nitroso group, and/or a heterocyclic nitric oxide donor group. The heterocyclic nitric oxide donor group is preferably a furoxan, a sydnonimine, an oxatriazole-5-one and/or an oxatriazole-5-imine. Thus, a mixture of nitrooxy-4-piperidinylnitrate (1.045 g, 5 mmol) and pyruvic acid (440 mg, 5 mmol) in dichloromethane was treated with triethylamine (0.7 mL). To this solution was added 1-ethyl-3-(3-dimethylaminopropyl)carbamide hydrochloride (EDAC) (960 mg, 5 mmol) followed by dimethylaminopyridine (DMAP, 610 mg, 5 mmol). The resulting solution was then stirred under nitrogen atmospheric at room temperature overnight. The reaction mixture was diluted with dichloromethane and washed with water, brine, dried over sodium sulfate, filtered, and the solvent was evaporated at reduced pressure. The product was purified by column chromatog. to give 1-[4-(nitrooxy)piperidyl]propane-1,2-dione (470 mg, 44% yield) as a colorless thick oil.

L13 ANSWER 14 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2005:547257 HCAPLUS

DOCUMENT NUMBER: 143:77866

TITLE: Preparation of nitrate esters having a  $\beta$ - or  $\gamma$ -sulfur atom for protection of cells/tissues from oxidative damage.

INVENTOR(S): Thatcher, Gregory R. j.; Bennett, Brian M.; Reynolds, James N.; Boegman, Roland J.; Jhamandas, Khem USA

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 83 pp., Cont.-in-part of U.S. Ser. No. 147,808.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 6

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005137191	A1	20050623	US 2004-943264	20040917
US 5807847	A	19980915	US 1996-658145	19960604
US 5883122	A	19990316	US 1997-867856	19970603
US 6310052	B1	20011030	US 1999-267379	19990315
US 7115661	B1	20061003	US 1999-473713	19991229
EP 1518553	A2	20050330	EP 2004-28372	20001227
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR				
US 2002177622	A1	20021128	US 2002-147808	20020520
US 6916835	B2	20050712		
AU 2005284573	A1	20060323	AU 2005-284573	20050916
CA 2580627	A1	20060323	CA 2005-2580627	20050916
WO 2006029532	A1	20060323	WO 2005-CA1417	20050916

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

EP 1797100 A1 20070620 EP 2005-787832 20050916

R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR

PRIORITY APPLN. INFO.: US 1996-658145 A2 19960604  
US 1997-867856 A2 19970603  
US 1999-267379 A3 19990315  
US 1999-473713 A2 19991229  
US 2002-147808 A2 20020520  
EP 2000-986925 A3 20001227  
US 2001-851591 A3 20010510  
US 2002-108513 A3 20020329  
US 2004-943264 A 20040917  
WO 2005-CA1417 W 20050916

OTHER SOURCE(S): MARPAT 143:77866

AB YXCR3R4(CR17R18)n(CR1R2)mONO2 [m, n = 0-10; R3, R4, R17 = H, nitrate, A; R1 = H, A; A = (substituted) (unsatd.) (cyclic) aliphatyl; R1R3, R4R17 = aliphatyl linkage; R2, R18 = H, A, XY; X = F, Cl, Br, Cl, NO2, CH2, CF2, O, NH, NMe, cyano, NHOH, N3, S, SCN, SO, SO2, etc.; Y = null, F, Cl, Br, Cl, Me, CF2H, CF3, OH, NH2, S, SCN, SH, etc.; with provisos], were prepared Thus, [O2NOCH2CH(ONO2)CH2S]2 (prepared via the corresponding Bunte salt) at 200  $\mu$ mol/kg s.c. gave virtually complete protection against 6-OHDA killing of dopaminergic neurons in rats.

L13 ANSWER 15 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2005:300267 HCAPLUS

DOCUMENT NUMBER: 142:349032

TITLE: Nitrosylated analgesic and/or antiinflammatory drugs having antiviral activity

INVENTOR(S): Bolla, Manlio; Santus, Giancarlo; De Soldato, Piero

PATENT ASSIGNEE(S): Nicox S.A., Fr.

SOURCE: PCT Int. Appl., 41 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005030224	A1	20050407	WO 2004-EP51551	20040720
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,			

TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW  
 RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,  
 AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,  
 EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,  
 SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,  
 SN, TD, TG

PRIORITY APPLN. INFO.:

EP 2003-292378

A 20030926

OTHER SOURCE(S):

MARPAT 142:349032

AB The invention discloses the use of nitrosylated analgesic and/or  
 antiinflammatory drugs for the prevention and/or treatment of viral  
 diseases and/or their complications.

REFERENCE COUNT:

7

THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 16 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2005:300196 HCAPLUS

DOCUMENT NUMBER: 142:355575

TITLE: Preparation of nitrosated glutamic acid compounds for  
 use in pharmaceutical compositions

INVENTOR(S): Garvey, David S.; Earl, Richard A.; Ezawa, Maiko;  
 Fang, Xinqin; Gaston, Ricky D.; Khanapure, Subhash P.;  
 Lin, Chia-en; Ranatunge, Ramani R.; Stevenson, Cheri  
 A.; Wey, Shiow-jyi

PATENT ASSIGNEE(S): Nitromed, Inc., USA

SOURCE: PCT Int. Appl., 151 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

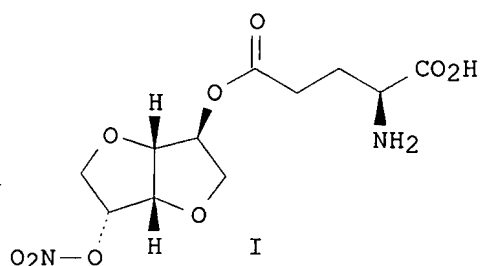
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005030135	A2	20050407	WO 2004-US31372	20040927
WO 2005030135	A3	20050616		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2004275809	A1	20050407	AU 2004-275809	20040927
CA 2539973	A1	20050407	CA 2004-2539973	20040927
EP 1673384	A2	20060628	EP 2004-784974	20040927
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK				
JP 2007518697	T	20070712	JP 2006-528208	20040927
US 2007037821	A1	20070215	US 2006-573030	20060322
PRIORITY APPLN. INFO.:			US 2003-505921P	P 20030926
			WO 2004-US31372	W 20040927
OTHER SOURCE(S):			CASREACT 142:355575; MARPAT 142:355575	
GI				





AB The invention describes novel nitrosated glutamic acid compds.  $RbNHCH(CH_2CH_2CO-K)CO-U3-D$  [Rb is H or alkyl; D is H, V3 or K (V3 is H or NO<sub>2</sub>); U3 is O, S(O)O-2 or NRaRi, where Ra is a lone pair of electrons, H or alkyl and Ri is H, alkyl, aryl, a carboxylic acid or ester, alkylsulfinyl, etc.; K is -W3a-Eb-(CReRf)p1-Ec-(CReRf)x-W3d-(CReRf)y-W3i-Ej-W3g-(CReRf)z-T3-V3, where a, b, c, d, g, i and j are independently integers 0-3; p1, x, y and z are independently integers 0-10; W3 is CO, CS, T3, (CReRf)1-10, alkyl, aryl, heterocyclyl, arylheterocyclyl or (CH<sub>2</sub>CH<sub>2</sub>O)0-5; E is T3, alkyl, aryl, (CReRf)1-10, heterocyclyl, arylheterocyclyl or (CH<sub>2</sub>CH<sub>2</sub>O)1-5; T3 is a covalent bond, CO, O, S, SO, SO<sub>2</sub> or NRaRi; Re, Rf are independently H, alkyl, cycloalkoxy, halo, hydroxy, hydroxyalkyl, alkoxyalkyl, arylheterocyclyl, alkylaryl, etc.] and their pharmaceutically-acceptable salts and novel compns. comprising at least one nitrosated glutamic acid compound and optionally at least one nitric oxide donor and/or at least one therapeutic agent. The invention also provides methods for treating various diseases and for targeted delivery of compds. and nitric oxide to organs, cells or tissues containing the enzyme  $\gamma$ -glutamyl transpeptidase. Thus, nitrosated glutamic acid ester I.HCl was prepared by esterification of Boc-L-Glu-OBu-t (Boc = tert-butoxycarbonyl) with isosorbide-5-mononitrate (DMAP/EDAC in CH<sub>2</sub>Cl<sub>2</sub>) and deprotection.

L13 ANSWER 17 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2005:120707 HCAPLUS

DOCUMENT NUMBER: 142:191264

TITLE: Preparation of nitro derivatives of heterocyclic compounds as angiotensin II receptor blockers for therapeutic use

INVENTOR(S): Almirante, Nicoletta; Del Soldato, Piero; Ongini, Ennio

PATENT ASSIGNEE(S): Nicox S.A., Fr.

SOURCE: PCT Int. Appl., 104 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005011646	A2	20050210	WO 2004-EP51550	20040720
WO 2005011646	A3	20050421		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,

CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,  
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 NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,  
 TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW  
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 AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,  
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 SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,  
 SN, TD, TG  
 AU 2004260830 A1 20050210 AU 2004-260830 20040720  
 CA 2534451 A1 20050210 CA 2004-2534451 20040720  
 EP 1653950 A2 20060510 EP 2004-766269 20040720  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK  
 CN 1832742 A 20060913 CN 2004-80022483 20040720  
 BR 2004013028 A 20061003 BR 2004-13028 20040720  
 JP 2007500684 T 20070118 JP 2006-521571 20040720  
 AU 2005263655 A1 20060126 AU 2005-263655 20050202  
 CA 2574666 A1 20060126 CA 2005-2574666 20050202  
 WO 2006008196 A1 20060126 WO 2005-EP50459 20050202  
 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,  
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 EP 1778617 A1 20070502 EP 2005-707928 20050202  
 R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,  
 IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA,  
 HR, LV, MK, YU  
 CN 1984871 A 20070620 CN 2005-80024051 20050202  
 US 2006276523 A1 20061207 US 2006-566292 20060127  
 MX 2006PA01263 A 20060411 MX 2006-PA1263 20060131  
 IN 2006CN00674 A 20070608 IN 2006-CN674 20060223  
 NO 2006000900 A 20060224 NO 2006-900 20060224  
 IN 2007CN00727 A 20070824 IN 2007-CN727 20070220  
 PRIORITY APPLN. INFO.: EP 2003-102379 A 20030731  
 WO 2004-EP51550 W 20040720  
 WO 2005-EP50459 W 20050202

OTHER SOURCE(S): CASREACT 142:191264; MARPAT 142:191264  
 AB Angiotensin II receptor blocker nitro derivs. of formula (I): R-(Y-ONO<sub>2</sub>)s  
 (I) having wider pharmacol. activity and enhanced tolerability are  
 claimed. They can be employed for treating cardiovascular, renal and  
 chronic liver diseases and inflammatory processes.

L13 ANSWER 18 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 2004:1154582 HCAPLUS  
 DOCUMENT NUMBER: 142:100367  
 TITLE: Pharmaceutical compositions based on diclofenac  
 derivative  
 INVENTOR(S): Gustafsson, Christina; Kjellberg, Ulf; Morein, Sven

PATENT ASSIGNEE(S): Nicox S.A., Fr.  
 SOURCE: PCT Int. Appl., 26 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004112753	A1	20041229	WO 2004-SE1017	20040623
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
CA 2529963	A1	20041229	CA 2004-2529963	20040623
EP 1635790	A1	20060322	EP 2004-749055	20040623
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK			
JP 2007521267	T	20070802	JP 2006-517054	20040623
US 2006141044	A1	20060629	US 2005-560824	20051215
PRIORITY APPLN. INFO.:			SE 2003-1880	A 20030625
			WO 2004-SE1017	W 20040623

AB The present invention relates to particles comprising the NO-donating diclofenac derivative, 2-[2-(nitrooxy)ethoxy]ethyl {2-[(2,6-dichlorophenyl)amino]phenyl}acetate (I), optionally mixed with one or more surfactant(s) and to a new drug delivery composition comprising said particles optionally in combination with a second drug. Furthermore, the invention relates to processes for preparing said particles and drug delivery

composition as

well as the use of said composition in the manufacturing of a medicament. For example, 10.5 g I and 29.5 g Pearlitol 100 SD were mixed and the mixture was heated to 75° until the drug was fully melted. The mixture was cooled to room temperature and the powder obtained was sieved through a 0.355

mm

sieve. The sieved powder (37.8 g) was mixed with 0.62 g microcryst. cellulose, 0.63 g Polyvidon XL, and 0.41 g Polyvidon K-30, and the powder was wet-granulated. The granulate was dried overnight at 45°, 0.38 g colloidal silica was added and the powder was mixed. Sodium stearyl fumarate (0.20 g) was added to the mixture followed by mixing. The granulate was filled into hard gelatin capsules. The drug release from capsules was 12.1%, 33.4%, 60.7%, 79.6% and 88.14% in 5, 10, 20, 45, and 90 min, resp.

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 19 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:1124626 HCAPLUS

DOCUMENT NUMBER: 142:79913

TITLE: Enalapril-nitroxy derivatives and related compounds as

ace inhibitors for the treatment of cardiovascular diseases

INVENTOR(S): Almirante, Nicoletta; Ongini, Ennio; Del Soldato, Piero

PATENT ASSIGNEE(S): Nicox S. A., Fr.

SOURCE: PCT Int. Appl., 132 pp.  
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004110432	A1	20041223	WO 2004-EP51089	20040611
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2004246821	A1	20041223	AU 2004-246821	20040611
CA 2529478	A1	20041223	CA 2004-2529478	20040611
EP 1635816	A1	20060322	EP 2004-741779	20040611
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK				
BR 2004011430	A	20060725	BR 2004-11430	20040611
CN 1809345	A	20060726	CN 2004-80017127	20040611
US 2005004100	A1	20050106	US 2004-869038	20040617
US 7217733	B2	20070515		
MX 2005PA13771	A	20060308	MX 2005-PA13771	20051215
IN 2006CN00220	A	20070427	IN 2006-CN220	20060117
NO 2006000268	A	20060315	NO 2006-268	20060118
PRIORITY APPLN. INFO.:			EP 2003-101796	A 20030619
			WO 2004-EP51089	W 20040611

OTHER SOURCE(S): MARPAT 142:79913

AB Disclosure is compds. with a general formula of A-(X1-ONO2)S, wherein A is a known ACE-inhibitor such as enalapril and X1 is a spacer such as a (C1-C6)-alkylene. The compds. can be used as ACE-inhibitors for the treatment of cardiovascular and renal diseases and inflammatory processes. The compds. have an improved pharmacol. activity when compared with the structurally closest related prior art compound. For example, synthesized N-[(1S)-1-ethoxycarbonyl-3-phenylpropyl]-L-alanyl-L-proline 3-nitrooxypropyl ester hydrogen maleate was found to have good vasorelaxation property.

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 20 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:1059168 HCAPLUS

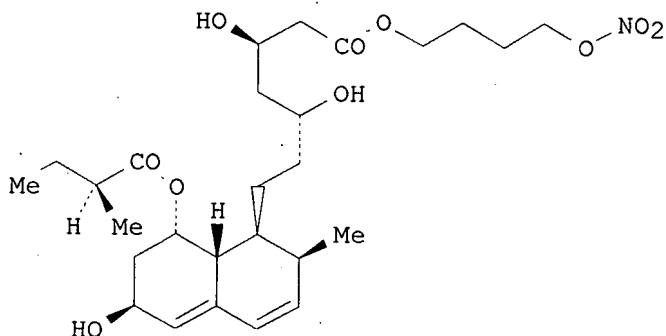
DOCUMENT NUMBER: 142:38061

TITLE: Preparation of nitrooxy derivatives of fluvastatin,

pravastatin, cerivastatin, atorvastatin and  
rosuvastatin as cholesterol-reducing agents with  
improved anti-inflammatory, antithrombotic and  
anti-platelet activity

INVENTOR(S): Benedini, Francesca; Ongini, Ennio; Del Soldato, Piero  
PATENT ASSIGNEE(S): Nicox S. A., Fr.  
SOURCE: PCT Int. Appl., 53 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004105754	A1	20041209	WO 2004-EP50897	20040524
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2005165084	A1	20050728	US 2004-849561	20040520
US 7166638	B2	20070123		
AU 2004243443	A1	20041209	AU 2004-243443	20040524
CA 2527168	A1	20041209	CA 2004-2527168	20040524
EP 1626716	A1	20060222	EP 2004-741636	20040524
EP 1626716	B1	20070207		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK				
BR 2004010049	A	20060425	BR 2004-10049	20040524
CN 1794987	A	20060628	CN 2004-80014498	20040524
AT 353214	T	20070215	AT 2004-741636	20040524
MX 2005PA12755	A	20060213	MX 2005-PA12755	20051125
NO 2005006152	A	20051223	NO 2005-6152	20051223
IN 2005CN03560	A	20070525	IN 2005-CN3560	20051227
US 2007072942	A1	20070329	US 2006-590770	20061101
PRIORITY APPLN. INFO.:			EP 2003-101530	A 20030527
			US 2004-849561	A3 20040520
			WO 2004-EP50897	W 20040524
OTHER SOURCE(S):	MARPAT 142:38061			
GI				



AB Nitrooxy derivs. of therapeutic agents, such as RCO-X-Y-ONO<sub>2</sub> [RCO = acyl residue of therapeutic agents, including statin acids, such as fluvastatin, pravastatin, cerivastatin, atorvastatin and rosuvastatin, ACE inhibitors, angiotensin II receptor antagonists,  $\beta$ -adrenergic blockers, calcium channel blockers, antithrombotics and aspirin; X = O, S, NR1; Y = linking group, such as, alkylene or phenylene alone or in combination; R1 = H, alkyl], with improved pharmacol. activity and enhanced tolerability were prepared for therapeutic use in treating and/or preventing several diseases, in particular coronary syndromes and neurodegenerative disorders and autoimmune disorders, as well as for reducing cholesterol levels. The vascular disorders for treatment include acute coronary syndromes, stroke, peripheral vascular diseases, disorders associated with endothelial dysfunction, peripheral ischemia, vascular complications in diabetic patients and atherosclerosis. The neurodegenerative diseases for treatment include Alzheimer's disease, Parkinson's disease and multiple sclerosis. Thus, ester I was prepared via an esterification reaction of pravastatin sodium with 1,4-dibromobutane in DMF and subsequent treatment of the resulting 4-bromobutanyl pravastatin ester with silver nitrate in MeCN. The prepared nitrooxy statin derivs. were assayed for their ability to induce vasorelaxation, for their effect in vitro on inflammatory pathways, for activity on peripheral vascular disease, for effect on leukocyte adhesion, for antithrombotic activity, for anti-platelet activity, and for inhibition of tissue factor expression.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 21 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:739958 HCAPLUS

DOCUMENT NUMBER: 141:260542

TITLE: Preparation of nitric oxide releasing prodrugs of diaryl-2-(5H)-furanones as selective cyclooxygenase-2 inhibitors

INVENTOR(S): Berthelette, Carl; Li, Lianhai; Sturino, Claudio; Wang, Zhaoyin

PATENT ASSIGNEE(S): Merck Frosst Company, Can.

SOURCE: U.S. Pat. Appl. Publ., 19 pp.

CODEN: USXXCO

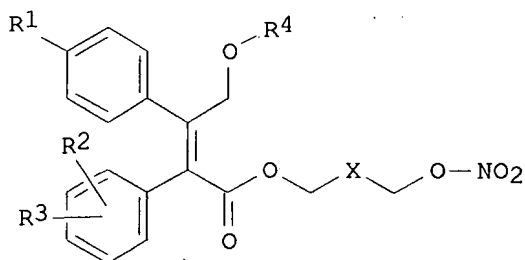
DOCUMENT TYPE: Patent

LANGUAGE: English

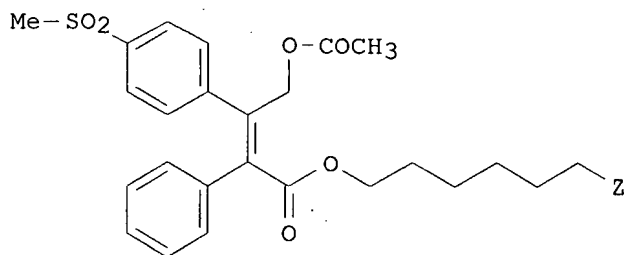
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004176331	A1	20040909	US 2004-790288	20040301
US 7169809	B2	20070130		
AU 2004240700	A1	20041202	AU 2004-240700	20040301
CA 2517490	A1	20041202	CA 2004-2517490	20040301
WO 2004103955	A1	20041202	WO 2004-CA314	20040301
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
EP 1601644	A1	20051207	EP 2004-761562	20040301
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK			
JP 2007516954	T	20070628	JP 2006-529472	20040301
PRIORITY APPLN. INFO.:			US 2003-452124P	P 20030305
			WO 2004-CA314	W 20040301
OTHER SOURCE(S):	MARPAT 141:260542			
GI				



I



II

AB Title compds. I [X = (CH<sub>2</sub>)<sub>n</sub>; n = 3-6; R1 = SO<sub>2</sub>Me, SO<sub>2</sub>NH<sub>2</sub>, SO<sub>2</sub>NHCOCF<sub>3</sub>,

etc.; R2, R3 = H, halo, alkoxy, etc.; R4 = CO-alkyl, CO(CH2)<sub>m</sub>NR5R6; m = 1-4; R5, R6 = H, halo-substituted alkyl] and their pharmaceutically acceptable salts were prepared. For example, O-alkylation of AgNO<sub>3</sub> by bromide II (Z = Br), e.g., prepared from Rofecoxib in 6-steps, afforded nitrooxyhexyl II (Z = -ONO<sub>2</sub>). In human blood PGE<sub>2</sub> inhibition production assays, nitrooxyhexyl II (Z = -ONO<sub>2</sub>) exhibited an IC<sub>50</sub> value of 0.22 μM. Of note, the "unconverted prodrugs" of compds. I are inactive inhibitors of COX-1 and COX-2 activity. Compds. I are claimed useful for the treatment of cyclooxygenase-2 mediated diseases or conditions.

REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 22 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:267282 HCAPLUS

DOCUMENT NUMBER: 140:287165

TITLE: Manufacturing process for NO-donating compounds such as NO-donating diclofenac

INVENTOR(S): Andersson, Johan; Belli, Aldo; Cannata, Vincenzo; Hedberg, Martin; Palmgren, Andreas; Schuldei, Sigrid; Stroem, Marika; Villa, Marco

PATENT ASSIGNEE(S): Astrazeneca UK Limited, UK; Astrazeneca AB

SOURCE: PCT Int. Appl., 68 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004026808	A1	20040401	WO 2003-SE1465	20030918
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2498943	A1	20040401	CA 2003-2498943	20030918
AU 2003265035	A1	20040408	AU 2003-265035	20030918
BR 2003014365	A	20050719	BR 2003-14365	20030918
EP 1558559	A1	20050803	EP 2003-797782	20030918
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
CN 1684940	A	20051019	CN 2003-822285	20030918
JP 2006500409	T	20060105	JP 2004-538109	20030918
ZA 2005002224	A	20060222	ZA 2005-2224	20050316
IN 2005CN00408	A	20070330	IN 2005-CN408	20050317
MX 2005PA03050	A	20050527	MX 2005-PA3050	20050318
US 2006122402	A1	20060608	US 2005-527647	20050801
PRIORITY APPLN. INFO.:			SE 2002-2801	A 20020920
			SE 2003-1476	A 20030520
			WO 2003-SE1465	W 20030918
OTHER SOURCE(S):			CASREACT 140:287165; MARPAT 140:287165	



## 10/522986 NITROOXYALKYL SUBTD ESTERS

AB NO-Donating compds. M<sub>n</sub>AmCO<sub>2</sub>XONop [M = residue of an NSAID, COX-1 inhibitor or COX-2 inhibitor; L = O, S, CO<sub>2</sub>, (un)substituted CONH, NH, CO, CH<sub>2</sub>, CH<sub>2</sub>CO, CH<sub>2</sub>CONH, CH<sub>2</sub>CO<sub>2</sub>; A = (un)substituted alkylene; X = carbon linker; m, n = 0-3; p = 1, 2] are prepared by treating M<sub>n</sub>AmCO<sub>2</sub>H with HOXOH, treating M<sub>n</sub>AmCO<sub>2</sub>XOH with RSO<sub>2</sub>Cl [R = alkyl, (un)substituted Ph, CH<sub>2</sub>Ph, halogen, CF<sub>3</sub>, C<sub>4</sub>F<sub>9</sub>], and treating M<sub>n</sub>AmCO<sub>2</sub>XO<sub>3</sub>SR with nitrate. A substantially crystalline form of 2-[2-(nitrooxy)ethoxy]ethyl {2-[(2,6-dichlorophenyl)amino]phenyl}acetate is reported.

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 23 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:41217 HCAPLUS

DOCUMENT NUMBER: 140:111135

TITLE: Preparation of nitrosated nonsteroidal antiinflammatory compounds

INVENTOR(S): Earl, Richard A.; Ezawa, Maiko; Fang, Xinqin; Garvey, David S.; Gaston, Ricky D.; Khanapure, Subhash P.; Letts, Gordon L.; Lin, Chia-En; Ranatunge, Ramani R.; Richardson, Stewart K.; Schroeder, Joseph D.; Stevenson, Cheri A.; Wey, Shioh-Jyi

PATENT ASSIGNEE(S): Nitromed, Inc., USA

SOURCE: PCT Int. Appl., 145 pp.

CODEN: PIXXD2

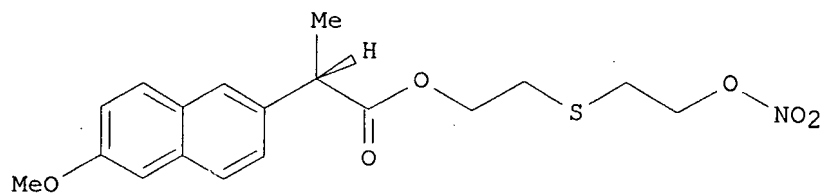
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004004648	A2	20040115	WO 2003-US21026	20030703
WO 2004004648	A3	20041028		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
CA 2491127	A1	20040115	CA 2003-2491127	20030703
AU 2003247792	A1	20040123	AU 2003-247792	20030703
US 2004024057	A1	20040205	US 2003-612014	20030703
US 7163958	B2	20070116		
EP 1539729	A2	20050615	EP 2003-763193	20030703
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK			
JP 2005539089	T	20051222	JP 2004-562619	20030703
US 2005222243	A1	20051006	US 2005-134358	20050523
PRIORITY APPLN. INFO.:			US 2002-393111P	P 20020703
			US 2002-397979P	P 20020724
			US 2002-418353P	P 20021016
			US 2003-449798P	P 20030226
			US 2003-456182P	P 20030321

US 2003-612014  
WO 2003-US21026A3 20030703  
W 20030703OTHER SOURCE(S): MARPAT 140:111135  
GI

AB Title compds.  $R_n R_m HC-CO-X$  [ $R_m = H, \text{alkyl}$ ;  $R_n = 4-((\text{thiophen-2-yl})\text{carbonyl})\text{phenyl}$ , 3-(benzoyl)phenyl, etc.;  $X = Y\text{-alkyl-aryl}$ , etc.;  $Y = O, S; I$ ] are prepared For instance, naproxen is coupled to 2,2'-thiodiethanol ( $CH_2Cl_2$ , DMAP, EDCI) and treated with  $Ac_2O/HNO_3$  at  $0^\circ$  to give II. I are nitrosated nonsteroidal antiinflammatory drugs (NSAIDs) used alone or are combined with one compound that donates, transfers or releases nitric oxide, stimulates endogenous synthesis of nitric oxide, elevates endogenous levels of endothelium-derived relaxing factor or is a substrate for nitric oxide synthase. The invention provides methods for treating inflammation, pain, fever, gastrointestinal disorders, etc.

L13 ANSWER 24 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:2666 HCAPLUS

DOCUMENT NUMBER: 140:65191

TITLE: Oral pharmaceutical liquid drugs containing nitrate ester NSAIDs having improved bioavailability  
INVENTOR(S): Del Soldato, Piero; Santus, Giancarlo; Macelloni, Cristina

PATENT ASSIGNEE(S): Nicox S.A., Fr.

SOURCE: PCT Int. Appl., 46 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

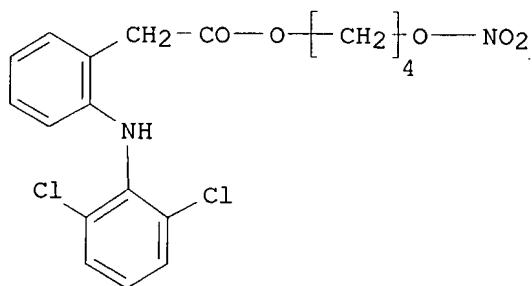
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004000273	A1	20031231	WO 2003-EP6496	20030620
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
IT 2002MI1392	A1	20031229	IT 2002-MI1392	20020625

## 10/522986 NITROOXYALKYL SUBTD ESTERS

CA 2491152	A1	20031231	CA 2003-2491152	20030620
AU 2003246564	A1	20040106	AU 2003-246564	20030620
EP 1526839	A1	20050504	EP 2003-760660	20030620
EP 1526839	B1	20070314		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
CN 1665486	A	20050907	CN 2003-815181	20030620
JP 2005530835	T	20051013	JP 2004-514802	20030620
NZ 537204	A	20060728	NZ 2003-537204	20030620
AT 356612	T	20070415	AT 2003-760660	20030620
ZA 2004010109	A	20050902	ZA 2004-10109	20041214
MX 2004PA12852	A	20050608	MX 2004-PA12852	20041216
NO 2005000347	A	20050121	NO 2005-347	20050121
US 2006171969	A1	20060803	US 2005-515621	20050912
PRIORITY APPLN. INFO.:			IT 2002-MI1392	A 20020625
			WO 2003-EP6496	W 20030620

GI



AB The present invention relates to new pharmaceutical compns. for the administration of liquid drugs in solid oral forms, said compns. comprising one or more active ingredients, one or more surface-active agents and optionally a co-surfactant and/or an absorption enhancer absorbed on a solid inert carrier. An emulsion was prepared containing I 100, Cremophor EL 50, Phospholipon 80H 50, Aerosil 200 100, and Explotab 100 g.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 25 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2003:991299 HCAPLUS

DOCUMENT NUMBER: 140:35983

TITLE: Nitrosated and/or nitrosylated cyclooxygenase-2 selective inhibitors, compositions and methods of use

INVENTOR(S): Letts, L. Gordon; Garvey, David S.

PATENT ASSIGNEE(S): Nitromed, Inc., USA

SOURCE: PCT Int. Appl., 56 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 2003103602	A2	20031218	WO 2003-US18052	20030610
WO 2003103602	A3	20040401		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2487414	A1	20031218	CA 2003-2487414	20030610
AU 2003248642	A1	20031222	AU 2003-248642	20030610
US 2004072899	A1	20040415	US 2003-718060	20030610
US 7220749	B2	20070522		
EP 1539134	A2	20050615	EP 2003-757428	20030610
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
JP 2006501161	T	20060112	JP 2004-510723	20030610
US 2007179195	A1	20070802	US 2007-730886	20070404
PRIORITY APPLN. INFO.:				
			US 2002-387433P	P 20020611
			US 2003-718060	A3 20030610
			WO 2003-US18052	W 20030610

OTHER SOURCE(S): MARPAT 140:35983

AB The invention describes novel nitrosated and/or nitrosylated cyclooxygenase 2 (COX-2) selective inhibitors and novel compns. comprising at least one nitrosated and/or nitrosylated cyclooxygenase 2 (COX-2) selective inhibitor, and, optionally, at least one compound that donates, transfers or releases nitric oxide, stimulates endogenous synthesis of nitric oxide, elevates endogenous levels of endothelium-derived relaxing factor or is a substrate for nitric oxide synthase, and/or, optionally, at least one therapeutic agent. The invention also provides novel compns. comprising at least one COX-2 selective inhibitor, that is optionally nitrosated and/or nitrosylated, and, optionally, at least one nitric oxide donor and/or at least one therapeutic agent. The invention also provides methods for treating inflammation, pain and fever; for treating and/or improving the gastrointestinal properties of COX-2 selective inhibitors; for facilitating wound healing; for treating and/or preventing renal and/or respiratory toxicity; for treating and/or preventing other disorders resulting from elevated levels of cyclooxygenase-2; and for improving the cardiovascular profile of COX-2 selective inhibitors. The invention also provides novel kits comprising at least one COX-2 selective inhibitor optionally nitrosated and/or nitrosylated, and, optionally, at least one nitric oxide donor, and/or, optionally, at least one therapeutic agent. The novel cyclooxygenase 2 selective inhibitors of the invention are preferably 2(2-((2-chloro-6-fluorophenyl) amino)5-methylphenyl)acetic acid and nitrosated derivs. thereof.

L13 ANSWER 26 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2003:818296 HCAPLUS

DOCUMENT NUMBER: 139:302040

TITLE: Nitrooxy derivatives of antiinflammatory/analgesic compounds for the treatment of arthritis

INVENTOR(S): Del Soldato, Piero

PATENT ASSIGNEE(S): Nicox S.A., Fr.

SOURCE: PCT Int. Appl., 71 pp.

CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003084550	A1	20031016	WO 2003-EP3183	20030327
W: AE, AG, AL, AU, BA, BB, BR, BZ, CA, CN, CO, CR, CU, DM, DZ, EC, GD, GE, HR, ID, IL, IN, IS, JP, KP, KR, LC, LK, LR, LT, LV, MA, MG, MK, MN, MX, NO, NZ, OM, PH, PL, SG, TN, TT, UA, US, UZ, VN, YU, ZA				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
IT 2002MI0773	A1	20031013	IT 2002-MI773	20020411
AU 2003224002	A1	20031020	AU 2003-224002	20030327
EP 1492543	A1	20050105	EP 2003-720377	20030327
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
JP 2005522472	T	20050728	JP 2003-581790	20030327
US 2007010458	A1	20070111	US 2006-509675	20060913
PRIORITY APPLN. INFO.:			IT 2002-MI773	A 20020411
			WO 2003-EP3183	W 20030327

OTHER SOURCE(S): MARPAT 139:302040

AB Antiinflammatory and/or antiinflammatory/analgesic compds. having the formula A(B)b0(C)c0-N(O)s [A contains radical of nonsteroidal antiinflammatory or nonsteroidal antiinflammatory/analgesic drug; B, C = bivalent linking group; s = 1, 2; b0, c0 = 0, 1 (with proviso)], and salts thereof, are disclosed for use in the treatment of arthritis.

REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 27 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2003:777566 HCAPLUS

DOCUMENT NUMBER: 139:281272

TITLE: Nitric oxide-donating NSAIDS adsorbed into carrier particles

INVENTOR(S): Morein, Sven; Berg, Mats; Holmberg, Christina; Lundberg, Per Johan; Anders, Ringberg

PATENT ASSIGNEE(S): Astrazeneca Ab, Swed.; Astrazeneca Uk Limited

SOURCE: PCT Int. Appl., 57 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003080029	A1	20031002	WO 2003-SE468	20030320
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,				

PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT,  
 TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW  
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,  
 KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,  
 FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF,  
 BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG  
 AU 2003216006 A1 20031008 AU 2003-216006 20030320  
 EP 1490033 A1 20041229 EP 2003-745055 20030320  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK  
 US 2005129774 A1 20050616 US 2003-507368 20030320  
 JP 2005533751 T 20051110 JP 2003-577859 20030320  
 PRIORITY APPLN. INFO.: SE 2002-895 A 20020322  
 WO 2003-SE468 W 20030320

AB The present invention relates to porous particles comprising NO-donating nonsteroidal anti-inflammatory compound optionally mixed with surfactants and to new solid drug delivery composition comprising the particles optionally in combination with a second active drug. Furthermore, the invention relates to processes for producing the porous particles and solid drug delivery composition as well as the use of the composition in the manufacture of a medicament. The NO-donating NSAID may be in an oily or melted form. Thus, a tablet comprised 4-(nitrooxy)butyl (S)-2-(9-methoxy-2-naphthyl)propanoate (I) 250 and omeprazole 20 mg. Enteric over-coated pellets comprised omeprazole and a powder of the porous particles containing I were manufactured sep. before compressing the 2 components.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 28 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2003:652131 HCAPLUS

DOCUMENT NUMBER: 139:214237

TITLE: Preparation of nitrate prodrugs able to release nitric oxide in a controlled and selective way and their use for prevention and treatment of inflammatory, ischemic and proliferative diseases

INVENTOR(S): Scaramuzzino, Giovanni

PATENT ASSIGNEE(S): Italy

SOURCE: Eur. Pat. Appl., 313 pp.

CODEN: EPXXDW

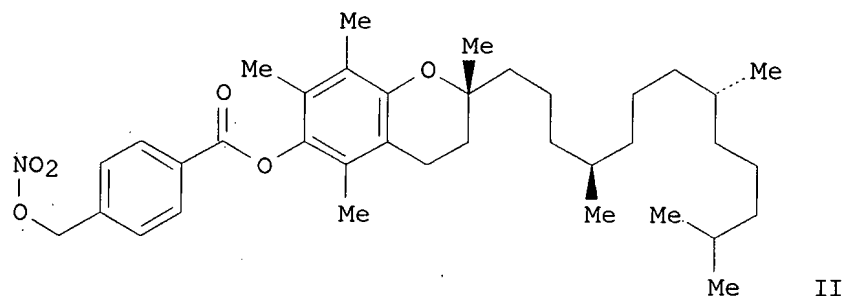
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1336602	A1	20030820	EP 2002-425075	20020213
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
PRIORITY APPLN. INFO.: GI			EP 2002-425075	20020213



AB New pharmaceutical compds. of general formula F-(X)<sub>q</sub> (I) [<sub>q</sub> = 1-5, preferably 1; F is chosen among drugs such as  $\delta$ -tocopherol, clidanac, diethylhomospermine, glucosamine, thymocartin, vofopitant, etc.; X is chosen among 4 groups M, T, V, and Y where M = ONO<sub>2</sub>, nitrate salt, nitrite ester, ONO, thioinitrite, SNO, etc., T = OR<sub>1</sub>-M, OR<sub>1</sub>OR<sub>1</sub>-M, SR<sub>1</sub>NR<sub>2</sub>R<sub>1</sub>-M, NR<sub>2</sub>R<sub>1</sub>-M, NR<sub>2</sub>R<sub>1</sub>SR<sub>1</sub>-M, etc., R<sub>1</sub> = saturated or unsatd., linear or branched alkylene, having 1 to 21 carbon atoms or a saturated or unsatd., optionally heterosubstituted or branched cycloalkylene, having 3 to 7 carbon atoms or an optionally heterosubstituted arylene having 3 to 7 carbon atoms; R<sub>2</sub> = H, saturated or unsatd., linear or branched 1-21 carbon atom alkyl, saturated or unsatd. optionally heterosubstituted or branched 3-7 carbon cycloalkyl, optionally heterosubstituted 3-7 carbon aryl; R<sub>1</sub>, R<sub>2</sub> = OH, SH, F, Cl, Br, OPO<sub>3</sub>H<sub>2</sub>, CO<sub>2</sub>H, etc.; bond between F and T = carboxylic ester, carboxylic amide, glycoside, azo, thioester, sulfonic ester, etc.; V = Z-M<sub>2</sub>, OZ-M<sub>2</sub>, NR<sub>2</sub>Z-M<sub>2</sub>, R<sub>1</sub>Z-M<sub>2</sub>, OR<sub>1</sub>-M<sub>2</sub>, OR<sub>1</sub>Z-M<sub>2</sub>, M<sub>2</sub> = M, R<sub>1</sub>-M, OR<sub>1</sub>-M, SR<sub>1</sub>-M, NR<sub>2</sub>R<sub>1</sub>-M; ZM<sub>2</sub> = COCH<sub>2</sub>CH(M<sub>2</sub>)CH<sub>2</sub>N+Me<sub>3</sub>, COCH<sub>2</sub>CH<sub>2</sub>COM<sub>2</sub>, COCH(NHR<sub>2</sub>)CH<sub>2</sub>M<sub>2</sub>, etc.; Y = 4-COC<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>ONO<sub>2</sub>, O(CH<sub>2</sub>)<sub>4</sub>ONO<sub>2</sub>, COCH(NH<sub>2</sub>)CH<sub>2</sub>ONO<sub>2</sub>, 3-OC<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>ONO<sub>2</sub>, etc.] were prepared For example,  $\alpha$ -tocopherol reacted with 4-HO<sub>2</sub>CC<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>ONO<sub>2</sub> to give the nitroxymethyl derivative II. The compds. of general formula I are nitrate prodrugs which can release nitric oxide in vivo in a controlled and selective way and without hypotensive side effects and for this reason they are useful for the preparation of medicines for prevention and treatment of inflammatory, ischemic, degenerative and proliferative diseases of musculoskeletal, tegumental, respiratory, gastrointestinal, genito-urinary and central nervous systems.

REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 29 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2003:364668 HCAPLUS

DOCUMENT NUMBER: 139:127237

TITLE: Nitric oxide-donating non-steroidal anti-inflammatory drugs: the case of nitro derivatives of aspirin

AUTHOR(S): Chirolì, Valerio; Benedini, Francesca; Ongini, Ennio; Del Soldato, Piero

CORPORATE SOURCE: Nicox Research Institute, Bresso, Milan, 20091, Italy  
SOURCE: European Journal of Medicinal Chemistry (2003), 38(4), 441-446

CODEN: EJMCA5; ISSN: 0223-5234

PUBLISHER: Editions Scientifiques et Medicales Elsevier

DOCUMENT TYPE: Journal; General Review

LANGUAGE: English

AB A review. Nitric oxide (NO) acts as a key signaling mechanism in a number of cells and tissues in the mammalian organism. Modulation of the

biosynthesis of NO has emerged to be relevant to the treatment of a variety of human diseases. In the attempt to reduce the serious side effects of non-steroidal anti-inflammatory drugs (NSAIDs), especially in the gastrointestinal tract, a NO-releasing moiety has been linked to conventional NSAIDs. A prototypical example is that of NO-releasing derivs. of aspirin. Thanks to the cytoprotective action of NO such compds. do not produce gastric damage and are emerging as an interesting novel group of drugs for their unique pharmacol. properties.

REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 30 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2003:221490 HCAPLUS

DOCUMENT NUMBER: 138:260440

TITLE: Self emulsifying drug delivery system containing NSAIDs

INVENTOR(S): Holmberg, Christina

PATENT ASSIGNEE(S): Astrazeneca AB, Swed.

SOURCE: PCT Int. Appl., 49 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003022249	A1	20030320	WO 2002-SE1598	20020905
W:				
AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW:				
GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2002329149	A1	20030324	AU 2002-329149	20020905
EP 1427392	A1	20040616	EP 2002-765747	20020905
R:				
AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
JP 2005504788	T	20050217	JP 2003-526379	20020905
US 2004248974	A1	20041209	US 2004-488585	20040304
PRIORITY APPLN. INFO.:			SE 2001-2993	A 20010907
			WO 2002-SE1598	W 20020905

OTHER SOURCE(S): MARPAT 138:260440

AB A pharmaceutical composition suitable for oral administration, in form of an emulsion pre-concentrate, comprises 1 or more NO-releasing NSAID(s), 1 or more surfactants, of which at least one is phospholipid, the composition forming an in-situ oil-in-water emulsion upon contact with gastrointestinal fluids. The composition may optionally also comprise an addnl. oil or semi-solid fat. Further, 1 or more short-chain alcs. can optionally be included in the composition. Also within the scope of the invention is a combination with a proton pump inhibitor. The pharmaceutical composition is useful in the treatment of pain and inflammation. Further within the scope of the invention is kit comprising a pharmaceutical composition according to the



invention in a unit dosage form, in combination with a proton pump inhibitor, and the proton pump inhibitor is enteric coated. Thus, a formulation contained Lipoid S100 0.30, propylene glycol 0.90, and a NO-releasing NSAID 4.00 g.

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 31 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2002:736089 HCAPLUS

DOCUMENT NUMBER: 137:253012

TITLE: Pharmaceutical compositions containing NO-releasing NSAID and surfactants

INVENTOR(S): Siekmann, Britta; Thoring, Barbro

PATENT ASSIGNEE(S): Astrazeneca AB, Swed.

SOURCE: PCT Int. Appl., 37 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002074282	A1	20020926	WO 2002-SE476	20020313
W:				
AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
RW:				
GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2435825	A1	20020926	CA 2002-2435825	20020313
AU 2002237630	A1	20021003	AU 2002-237630	20020313
EP 1370239	A1	20031217	EP 2002-704035	20020313
R:				
AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
CN 1496253	A	20040512	CN 2002-806527	20020313
BR 2002007760	A	20040601	BR 2002-7760	20020313
JP 2004523577	T	20040805	JP 2002-572990	20020313
MX 2003PA07093	A	20031118	MX 2003-PA7093	20030807
ZA 2003006282	A	20041123	ZA 2003-6282	20030813
US 2004096494	A1	20040520	US 2003-471378	20030909
NO 2003004026	A	20031111	NO 2003-4026	20030911
PRIORITY APPLN. INFO.:			SE 2001-901	A 20010315
			WO 2002-SE476	W 20020313

OTHER SOURCE(S): MARPAT 137:253012

AB A new pharmaceutical composition in the form of lipoglobules comprises (a) 1 or more NO-releasing NSAIDs; (b) 1 or more surfactants; and (c) an aqueous phase, and is useful for the treatment of pain and inflammation. Thus, a composition contained 4-(nitrooxy)butyl 6-methoxy- $\alpha$ -methyl-2-naphthaleneacetate 0.77, fractionated coconut oil 2.97, Phospholipon-80 0.76, and Poloxamer-407 1.61 mg/g.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

## 10/522986 NITROOXYALKYL SUBTD ESTERS

L13 ANSWER 32 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 2001:676579 HCAPLUS  
 DOCUMENT NUMBER: 135:231708  
 TITLE: New self emulsifying drug delivery system  
 INVENTOR(S): Holmberg, Christina; Siekmann, Britta  
 PATENT ASSIGNEE(S): AstraZeneca AB, Swed.  
 SOURCE: PCT Int. Appl., 56 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001066088	A1	20010913	WO 2001-SE467	20010306
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2401498	A1	20010913	CA 2001-2401498	20010306
EP 1267832	A1	20030102	EP 2001-910305	20010306
EP 1267832	B1	20040602		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
BR 2001009014	A	20030603	BR 2001-9014	20010306
JP 2003525894	T	20030902	JP 2001-564741	20010306
HU 200300882	A2	20030929	HU 2003-882	20010306
EE 200200500	A	20040216	EE 2002-500	20010306
AT 268162	T	20040615	AT 2001-910305	20010306
NZ 521009	A	20040625	NZ 2001-521009	20010306
PT 1267832	T	20040930	PT 2001-910305	20010306
ES 2220728	T3	20041216	ES 2001-1910305	20010306
RU 2270675	C2	20060227	RU 2002-122744	20010306
IN 2002MN01102	A	20050304	IN 2002-MN1102	20020816
ZA 2002006740	A	20031124	ZA 2002-6740	20020822
MX 2002PA08657	A	20030224	MX 2002-PA8657	20020904
US 2003161846	A1	20030828	US 2002-220791	20020905
NO 2002004272	A	20021105	NO 2002-4272	20020906
HK 1050632	A1	20050318	HK 2003-102781	20030416
PRIORITY APPLN. INFO.:			SE 2000-773	A 20000308
			WO 2001-SE467	W 20010306

OTHER SOURCE(S): MARPAT 135:231708

AB The present invention claims and discloses a pharmaceutical composition suitable for oral administration, in form of an emulsion pre-concentrate, comprising: 1 or more NO-releasing NSAID(s), 1 or more surfactants, optionally an addnl. oil or semi-solid fat. The composition forms an in-situ oil-in-water emulsion upon contact with gastrointestinal fluids. The composition may optionally also comprise 1 or more short-chain alcs. Also within the scope of the invention is a combination with a proton pump inhibitor. The pharmaceutical composition is useful in the treatment of pain and inflammation. Further within the scope of the invention is kit

comprising a pharmaceutical composition according to the invention in a unit dosage form, in combination with a proton pump inhibitor, and the proton pump inhibitor is enteric coated. Thus, a semisolid formulation contained a NO-releasing NSAID 750, Pluronic F127 450, and omeprazole 20 g.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 33 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2001:137173 HCAPLUS

DOCUMENT NUMBER: 134:178396

TITLE: Synthesis, activity and formulations of pharmaceutical compounds for treatment of oxidative stress and/or endothelial dysfunction

INVENTOR(S): Del Soldato, Piero

PATENT ASSIGNEE(S): Nicox S.A., Fr.

SOURCE: PCT Int. Appl., 94 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001012584	A2	20010222	WO 2000-EP7225	20000727
WO 2001012584	A3	20020829		
W:	AE, AL, AU, BA, BB, BG, BR, CA, CN, CR, CU, CZ, DM, EE, GD, GE, HR, HU, ID, IL, IN, IS, JP, KP, KR, LC, LK, LR, LT, LV, MA, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, TR, TT, UA, US, UZ, VN, YU, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
IT 99MI1817	A1	20010212	IT 1999-MI1817	19990812
CA 2381409	A1	20010222	CA 2000-2381409	20000727
BR 2000013264	A	20020416	BR 2000-13264	20000727
EP 1252133	A2	20021030	EP 2000-953102	20000727
EP 1252133	B1	20050608		
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL			
HU 200203939	A2	20030328	HU 2002-3939	20000727
JP 2003515526	T	20030507	JP 2001-516885	20000727
CN 1433396	A	20030730	CN 2000-814049	20000727
NZ 516889	A	20041029	NZ 2000-516889	20000727
AU 781643	B2	20050602	AU 2000-65670	20000727
AT 297375	T	20050615	AT 2000-953102	20000727
EP 1593664	A1	20051109	EP 2005-104064	20000727
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, FI, RO, CY			
RU 2264383	C2	20051120	RU 2002-103509	20000727
ES 2243292	T3	20051201	ES 2000-953102	20000727
NZ 535559	A	20051223	NZ 2000-535559	20000727
CN 1923797	A	20070307	CN 2006-10136231	20000727
ZA 2002000628	A	20030423	ZA 2002-628	20020123
US 7186753	B1	20070306	US 2002-48469	20020207
NO 2002000623	A	20020409	NO 2002-623	20020208
MX 2002PA01519	A	20020702	MX 2002-PA1519	20020211

## 10/522986 NITROOXYALKYL SUBTD ESTERS

AU 2005202824	A1	20050721	AU 2005-202824	20050628
IN 2006CN01908	A	20070608	IN 2006-CN1908	20060530
US 2007197499	A1	20070823	US 2006-642783	20061221
PRIORITY APPLN. INFO.:			IT 1999-MI1817	A 19990812
			CN 2000-814049	A3 20000727
			EP 2000-953102	A3 20000727
			IN 2002-CN187	A3 20000727
			WO 2000-EP7225	W 20000727
			US 2002-48469	A1 20020207

OTHER SOURCE(S): MARPAT 134:178396

AB Comps. or their salts of general formula (I): A-B-N(O)s wherein: s is an integer equal to 1 or 2; A = R-T1-, wherein R is the drug radical and T1 = (CO)t or (X)t', wherein X = O, S, NR1c, R1c is H or a linear or branched alkyl or a free valence, t and t' are integers and equal to zero or 1, with the proviso that t = 1 when t' = 0; t = 0 when t' = 1; B = -TB -X2-O- wherein TB = (CO) when t = 0, TB = X when t' = 0, X being as above defined; X2, bivalent radical, is such that the precursor drug of A and the precursor of B meet resp. the pharmacol. tests described in the description. Synthesis, activity and formulations of pharmaceutical compds. for treatment of oxidative stress and/or endothelial dysfunction are disclosed. The precursors are such as to meet the pharmacol. test reported in the description.

L13 ANSWER 34 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2000:861483 HCAPLUS  
 DOCUMENT NUMBER: 134:25340  
 TITLE: New use of compounds as antibacterial agents  
 INVENTOR(S): Eek, Arne; Raud, Johan  
 PATENT ASSIGNEE(S): Astrazeneca AB, Swed.  
 SOURCE: PCT Int. Appl., 45 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000072838	A1	20001207	WO 2000-SE1071	20000525
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
TW 243672	B	20051121	TW 2000-89109689	20000519
CA 2373653	A1	20001207	CA 2000-2373653	20000525
BR 2000011116	A	20020219	BR 2000-11116	20000525
EP 1196155	A1	20020417	EP 2000-937451	20000525
EP 1196155	B1	20040804		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
TR 200103474	T2	20020422	TR 2001-3474	20000525
HU 200201502	A2	20020828	HU 2002-1502	20000525

JP 2003500442	T	20030107	JP 2000-620950	20000525
EE 200100647	A	20030217	EE 2001-647	20000525
NZ 515317	A	20040528	NZ 2000-515317	20000525
AT 272396	T	20040815	AT 2000-937451	20000525
AU 780678	B2	20050407	AU 2000-52623	20000525
RU 2252032	C2	20050520	RU 2001-135826	20000525
US 6593339	B1	20030715	US 2000-673007	20000929
IN 2001MN01424	A	20050304	IN 2001-MN1424	20011115
ZA 2001009497	A	20030217	ZA 2001-9497	20011116
BG 106158	A	20020628	BG 2001-106158	20011128
MX 2001PA12295	A	20020730	MX 2001-PA12295	20011129
NO 2001005855	A	20020130	NO 2001-5855	20011130
HK 1045814	A1	20050401	HK 2002-107373	20021009
US 2004048917	A1	20040311	US 2003-426952	20030501
PRIORITY APPLN. INFO.:			SE 1999-2027	A 19990601
			SE 1999-4704	A 19991221
			WO 2000-SE1071	W 20000525
			US 2000-673007	A1 20000929

AB The present invention discloses a new use of NO-releasing NSAIDs, especially NO-releasing NSAIDs of formula (I), or a pharmaceutically acceptable salt or enantiomer thereof, for the manufacture of a medicament for the treatment of bacterial infections, especially caused or mediated by *Helicobacter pylori*. Disclosed is also the new use of a NO-releasing NSAID in combination with an acid susceptible proton pump inhibitor for the treatment of bacterial infections.

REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 35 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1999:76862 HCAPLUS

DOCUMENT NUMBER: 130:186296

TITLE: Thermal stability of peroxy nitrates

AUTHOR(S): Kirchner, F.; Mayer-Figge, A.; Zabel, F.; Becker, K. H.

CORPORATE SOURCE: Bergische Universitat-Gesamthochschule Wuppertal, Physikalische Chemie/FB 9, Wuppertal, 42097, Germany

SOURCE: International Journal of Chemical Kinetics (1999), 31(2), 127-144

CODEN: IJCKBO; ISSN: 0538-8066

PUBLISHER: John Wiley & Sons, Inc.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Peroxynitrates are thermally unstable intermediates (at ambient temps.) in the atmospheric degradation of hydrocarbons. Thermal lifetimes of 9 peroxy nitrates

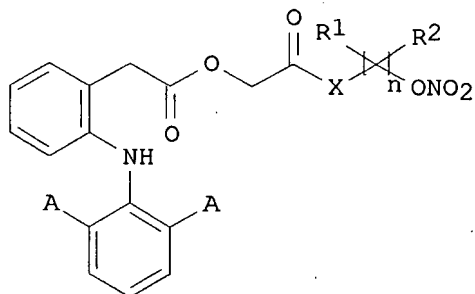
were measured as a function of temperature and, for 2 of them, also, as a function of total pressure. In the presence of excess NO, relative concns. of peroxy nitrates were followed in a 420 L reaction chamber as a function of time using long-path IR absorption with a Fourier transform spectrometer. Original data on the unimol. decomposition rate consts. are presented for the peroxy nitrates RO<sub>2</sub>NO<sub>2</sub> with R = C<sub>6</sub>H<sub>11</sub>, CH<sub>3</sub>C(O)CH<sub>2</sub>, C<sub>6</sub>H<sub>5</sub>CH<sub>2</sub>, CH<sub>2</sub>l, CH<sub>3</sub>C(O)OC(H)CH<sub>3</sub>, C<sub>6</sub>H<sub>5</sub>OCH<sub>2</sub>, (CH<sub>3</sub>)<sub>2</sub>NC(O), C<sub>6</sub>H<sub>5</sub>OC(O), and C<sub>2</sub>H<sub>5</sub>C(O). Thermal lifetimes at room temperature and atmospheric pressure are very short (on the order of seconds) for substituted Me peroxy nitrates (i.e., R'CH<sub>2</sub>O<sub>2</sub>NO<sub>2</sub>) but rather long for substituted formyl peroxy nitrates (i.e., R''C(O)O<sub>2</sub>NO<sub>2</sub>). Kinetic data from this and previous laboratory work were used to

derive structure-stability relationships allowing an estimate of the thermal lifetimes of peroxy nitrates from readily available <sup>13</sup>C NMR shift data.

REFERENCE COUNT: 67 THERE ARE 67 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L13 ANSWER 36 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1996:681459 HCAPLUS
DOCUMENT NUMBER: 125:328304
TITLE: Preparation of nitric esters of 2-(2,6-
dihalophenylamino)phenylacetoxyacetic acid derivatives
INVENTOR(S): Serra, Masia Xavier; Pi Sallent, Joan
PATENT ASSIGNEE(S): Prodes, S.A., Spain
SOURCE: Eur. Pat. Appl., 16 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:
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PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 738706	A1	19961023	EP 1996-106009	19960417
EP 738706	B1	19981007		
R: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
ES 2092962	A1	19961201	ES 1995-756	19950419
ES 2092962	B1	19970716		
AU 9650428	A	19961031	AU 1996-50428	19960401
AU 683790	B2	19971120		
ZA 9602981	A	19961022	ZA 1996-2981	19960415
CA 2174287	A1	19961020	CA 1996-2174287	19960416
HU 9600996	A2	19961128	HU 1996-996	19960417
CN 1138027	A	19961218	CN 1996-105067	19960417
AT 171936	T	19981015	AT 1996-106009	19960417
NO 9601537	A	19961021	NO 1996-1537	19960418
JP 09020738	A	19970121	JP 1996-98815	19960419
US 5844696	A	19981201	US 1996-634763	19960419
BR 9603235	A	19980428	BR 1996-3235	19960731
PRIORITY APPLN. INFO.:			ES 1995-756	A 19950419
OTHER SOURCE(S):	CASREACT 125:328304; MARPAT 125:328304			
GI				



AB The title compds. [I; A = F, Cl, Br; X = O, NH, NR (R = C1-8 alkyl); R1, R2 = C1-8 alkyl, n = 1-10], potentially useful as antiinflammatory agents (no data), were prepared by condensation of 2-(2,6-dihalophenylamino)phenylacetoxyacetic acid with a compound Y-(C)nR1R2ONO2 [Y = OH, NH2, NHR] in the presence of condensing agent such as N,N'-carbonyl diimidazole in an aprotic organic solvent.

L13 ANSWER 37 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1996:163887 HCAPLUS

DOCUMENT NUMBER: 124:201789

TITLE: Preparation of aryl nitrate ester compounds having antiinflammatory and well as analgesic and antithrombotic activities

INVENTOR(S): Del Soldato, Piero; Sanniccolo, Francesco

PATENT ASSIGNEE(S): Nicox Ltd., Ire.

SOURCE: PCT Int. Appl., 87 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

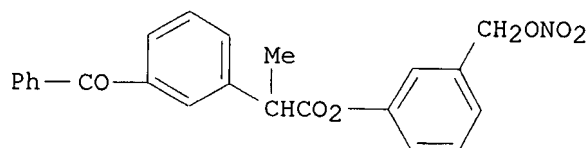
FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9530641	A1	19951116	WO 1995-EP1233	19950404
W: AM, AU, BB, BG, BR, BY, CA, CN, CZ, EE, FI, GE, HU, JP, KG, KP, KR, KZ, LK, LR, LT, LV, MD, MG, MN, MX, NO, NZ, PL, RO, RU, SI, SK, TJ, TT, UA, US, UZ, VN				
RW: KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2190087	C	19951116	CA 1995-2190087	19950404
CA 2190087	A1	19951116		
AU 9522156	A	19951129	AU 1995-22156	19950404
AU 702662	B2	19990225		
EP 759899	A1	19970305	EP 1995-915185	19950404
EP 759899	B1	19990915		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, NL, PT, SE				
HU 75961	A2	19970528	HU 1996-3107	19950404
BR 9507634	A	19970923	BR 1995-7634	19950404
JP 09512798	T	19971222	JP 1995-528615	19950404
AT 184589	T	19991015	AT 1995-915185	19950404
ES 2139199	T3	20000201	ES 1995-915185	19950404
RU 2145595	C1	20000220	RU 1996-123280	19950404
US 5861426	A	19990119	US 1997-737426	19970306
US 5780495	A	19980714	US 1997-902570	19970729
GR 3032078	T3	20000331	GR 1999-403169	19991208
PRIORITY APPLN. INFO.:			IT 1994-MI916	A 19940510
			IT 1994-MI1731	A 19940809
			GB 1993-20599	A 19931006
			WO 1995-EP1233	W 19950404
			US 1996-624508	A3 19960405

OTHER SOURCE(S): MARPAT 124:201789

GI



AB The title compds. AX1NO2 [A = R(COXu)t; t = 0, 1; u = 0, 1; X = O, (un)substituted NH or NR1c wherein R1c = alkyl; R = (un)substituted Ph, etc.; X = YO; Y = alkylene, cycloalkylene, oxyalkyl, etc.] (e.g., I), which inhibit cyclooxygenase, are prepared

L13 ANSWER 38 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1994:630196 HCAPLUS

DOCUMENT NUMBER: 121:230196

TITLE: Kinetic studies of peroxy nitrates and peroxy radicals

AUTHOR(S): Becker, K. H.; Kirchner, F.

CORPORATE SOURCE: Germany

SOURCE: Ber. - Bergische Univ., Gesamthochsch. Wuppertal, Fachbereich 9, Phys. Chem. (1994), 29, 123 pp.

CODEN: BBWCE4

DOCUMENT TYPE: Report

LANGUAGE: German

AB Rate consts. were determined for the thermal decomposition of peroxy nitrates RO2NO2

+ M → RO2 + NO2 + M, where R = Bz, CH3OC(O), C6H5OC(O), (CH3)2NC(O), CCl2FC(O), CCl2F2C(O), CF3C(O), CCl2FCH2, CClF2CH2, CH3OCH2, C6H5OCH2, AcOCH(CH3), C6H5CH2, CH3C(O)CH2, C6H11, CH2I. Under standard conditions the rate consts. differ by a factor of 60,000 depending on R. All the acyl peroxy nitrates are thermally much more stable than any of the alkyl peroxy nitrates. From a comparison of the results of this work with other measurements from this laboratory the following conclusions can be drawn: The thermal stability of peroxy nitrates is highly dependent on the electron d. at the carbon atom next to the O2NO2 group. Electron withdrawing substituents increase the thermal stability of peroxy nitrates compared to substituents which are less electron withdrawing. For alkyl peroxy nitrates inductive effects are most important. The electronegativities of the atoms next to the C atom of the CO2NO2 group will therefore determine the thermal stability of RO2NO2. For acyl peroxy nitrates mesomeric effects are more important than for alkyl peroxy nitrates and cannot be neglected. Correlation of the activation energies of thermal decomposition with 13C-NMR signal shifts δ of the corresponding R-X compds. (X = OCH3, Cl, F, H, OH, CH3) is discussed. Measurements for CH2IO2NO2 suggest that these equations are not valid if the substituents are heavy atoms. The ratios of the rate consts. of the reactions RO2 + NO2 + M → RO2NO2 + M and RO2 + NO → products were measured for three different RO2 radicals.

L13 ANSWER 39 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1983:521838 HCAPLUS

DOCUMENT NUMBER: 99:121838

TITLE: Nitroacetic acid ester

INVENTOR(S): Hamamoto, Toshikazu; Sugise, Ryoji

PATENT ASSIGNEE(S): Ube Industries, Ltd., Japan

SOURCE: Ger. Offen., 15 pp.

CODEN: GWXXBX



## 10/522986 NITROOXYALKYL SUBTD ESTERS

DOCUMENT TYPE: Patent  
LANGUAGE: German  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3246253	A1	19830630	DE 1982-3246253	19821214
DE 3246253	C2	19901011		
JP 58105944	A	19830624	JP 1981-202545	19811217
JP 03025411	B	19910405		
US 4433162	A	19840221	US 1982-447471	19821206
GB 2111494	A	19830706	GB 1982-34896	19821207
GB 2111494	B	19851023		
FR 2518539	A1	19830624	FR 1982-21249	19821217
FR 2518539	B1	19860321		
PRIORITY APPLN. INFO.:			JP 1981-202545	A 19811217

OTHER SOURCE(S): MARPAT 99:121838

AB O2NCH2CO2R (I) (R = alkyl, etc.) were prepared by treatment of a vinyl alkanoate with N2O5, then an alc. Thus, 3.10 g N2O5 and 3.020 mL O were passed over 2 h into 2.70 g CH2:CHOAc in 30 mL EtOAc at 15°, the mixture was stirred 10 min, 8.0 g MeOH were added at 10°, and the mixture was stirred 10 min to give 53% O2NCH2CO2Me. Also prepared were I (R = Pr, Bu, PhCH2, cyclohexyl).

L13 ANSWER 40 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1976:73636 HCAPLUS  
DOCUMENT NUMBER: 84:73636  
TITLE: Substituted nitroalkyl peroxyxynitrate  
INVENTOR(S): Cummings, William M.  
PATENT ASSIGNEE(S): Texaco Inc., USA  
SOURCE: U.S., 6 pp. Division of U.S. 3,853,944.  
CODEN: USXXAM

DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 2  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3910987	A	19751007	US 1974-430305	19740102
US 3732283	A	19730508	US 1971-144212	19710517
US 3853944	A	19741210	US 1972-311993	19721204
US 3910981	A	19751007	US 1974-430306	19740102
PRIORITY APPLN. INFO.:			US 1971-144212	A 19710517
			US 1972-311993	A3 19721204

AB About 12 allyl compds., RCH2CH:CH2 (R = e.g., AcO, BzO, OEt, Ph, Cl, cyano), were treated with N2O4 and O in CCl4 at .apprx.0-5° to give the peroxyxynitrates, RCH2CH(OONO2)CH2NO2, which (without isolation) were treated with NO at .apprx.-10° to give the nitrates, RCH2CH(ONO2)CH2NO2 (I). I are useful as fuel additives to increase the power output of petroleum distillates such as gasoline and kerosine (no data).

L13 ANSWER 41 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1974:110522 HCAPLUS  
DOCUMENT NUMBER: 80:110522

## 10/522986 NITROOXYALKYL SUBTD ESTERS

TITLE: Propellants of pulsed combustion  
INVENTOR(S): Wasmann, Friedrich W.  
PATENT ASSIGNEE(S): Germany, Federal Republic of  
SOURCE: Ger. Offen., 9 pp.  
CODEN: GWXXBX  
DOCUMENT TYPE: Patent  
LANGUAGE: German  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2235744	A1	19740131	DE 1972-2235744	19720721
DE 2235744	B2	19750605		
DE 2235744	C3	19760122		
FR 2193799	A1	19740222	FR 1973-26639	19730719
PRIORITY APPLN. INFO.:			DE 1972-2235744	A 19720721

AB Propellants with constant pulsed combustion (alternating smoldering and burning) consist of copolymers of polyol nitrate (meth)acrylates with vinyl compds., e.g. glycerol dinitrate acrylate-vinyl acetate copolymer (I), as smoldering components and fuels, resp. Inorg. perchlorates, e.g. LiClO<sub>4</sub>, are used as oxidizers. Thus, glycerol dinitrate acrylate 20-60, vinyl acetate 20-40, LiClO<sub>4</sub> 20-40, and Ba<sub>2</sub>O<sub>2</sub> 5% are heated 48 hr at 50° in closed glass tubes to give a propellant containing I with combustion pulse sequence 0.2-2 Hz.

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ACCESSION NUMBER: 1974:61665 HCAPLUS  
DOCUMENT NUMBER: 80:61665  
TITLE: Solid propellants with pulsatory characteristics  
AUTHOR(S): Wasmann, Friedrich W.  
CORPORATE SOURCE: Inst. Chem. Treib- Explosivst., Fraunhoferges.,  
Berghausen-Hummelberg, Fed. Rep. Ger.  
SOURCE: Explosivstoffe (1973), 21(1), 1-8  
CODEN: EXPVA5; ISSN: 0014-5068

DOCUMENT TYPE: Journal  
LANGUAGE: German

AB Solid propellants were prepared from copolymers mixed with inorg. O carriers. Unlike the usual solid propellants, these new systems have a burning rate that varies periodically at a frequency of 0.1-1000 Hz. The compns., methods of preparation, and properties of these new propellants are described. Nitrate group-containing monomers include ethylene glycol mononitrate, diglycol mononitrate, glycerol mono- and dinitrate, and pentaerythritol mono-, di-, and trinitrate. Copolymer components include styrene, vinyl acetate, and acrylic and methacrylic acid esters. Inorg. O-containing salts include Li, Ca, Sr, and Ba perchlorate.

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ACCESSION NUMBER: 1973:42848 HCAPLUS  
DOCUMENT NUMBER: 78:42848  
TITLE: 1-Nitro-2-nitratopropanes  
INVENTOR(S): Cummings, William Michael  
PATENT ASSIGNEE(S): Texaco Development Corp.  
SOURCE: Ger. Offen., 20 pp.  
CODEN: GWXXBX

DOCUMENT TYPE: Patent  
LANGUAGE: German

FAMILY ACC. NUM. COUNT: 2

## PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2157648	A	19721130	DE 1971-2157648	19711120
US 3732283	A	19730508	US 1971-144212	19710517
GB 1319890	A	19730613	GB 1971-54072	19711122
CA 984400	A1	19760224	CA 1972-142022	19720512
PRIORITY APPLN. INFO.:			US 1971-144212	A 19710517

AB Thirteen title compds.  $O_2NCH_2CR(ONO_2)CH_2R_1$  (I; R = H or Me;  $R_1 = OAc$ ,  $O_2CH$ ,  $O_2CCF_3$ ,  $O_2CEt$ ,  $O_2CC_6H_{13}$ , Bz,  $ONO_2$ , Cl, OEt, OPh, Ph, or CN), useful for improving the pour output of gasoline, were prepared via the peroxy nitrates  $O_2NCH_2CR(OONO_2)CH_2R_1$  (II) by reaction of  $CH_2:CRCH_2R_1$  with  $N_2O_4$  and O. Thus, 1:20  $N_2O_4$ -O was added to  $CH_2:CHCH_2OAc$  6 hr at 0° to give II (R = H,  $R_1 = OAc$ ), which on treatment with NO 30 min at -10° gave 90% I (R = H,  $R_1 = OAc$ ).

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ACCESSION NUMBER: 1957:62090 HCAPLUS

DOCUMENT NUMBER: 51:62090

ORIGINAL REFERENCE NO.: 51:11244b-i

TITLE: Action of nitrogen peroxides on epoxides

AUTHOR(S): Pujo, Anne Marie; Boileau, Jacques

SOURCE: Memorial des Poudres (1955), 37, 35-48

CODEN: MPOUAT; ISSN: 0369-1535

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

AB Anhydrous  $N_2O_4$  (I) reacted with ethylene oxide (II) and with propylene oxide (III) to give mixts. of glycol nitrite nitrates. Adding 44 g. II in 250 mL.  $CHCl_3$  or  $Et_2O$  slowly to a solution of 92 g. I in 500 mL.  $CHCl_3$  or  $Et_2O$  at 0°, stirring 30 min., keeping overnight, concentrating in vacuo, and distilling the oil (IV) gave  $O_2NOCH_2CH_2ONO$  (V), b17 58-60°, d20 1.3053, nD18 1.4240, and  $O_2NOCH_2CH_2OCH_2CH_2ONO$  (VI), b1 84-6°, nD20 1.4350. Adding IV to MeOH released MeONO; refluxing the MeOH solution 2 h. and distilling

gave  $HOCH_2CH_2ONO_2$  (VII), b1 65-6°, d21, 1.3395, nD20 1.4410,  $HOCH_2CH_2OCH_2CH_2ONO_2$  (VIII), b1 95-6°, d21 1.2620, nD20 1.4510, and a fraction, b1 96-119°. IV was obtained in 75% yield (1/3 VII and 1/3 VIII). The reaction proceeded more rapidly in the absence of solvent; using ratios of I to II of 1:1, 2:1, and 3:1 gave 73, 74, and 75% IV containing 40, 43, and 50% VII, resp., and 30, 33, and 35% VIII, resp. II bubbled through I in  $CHCl_3$  at 0° gave 50% VII and 42% VIII. Treating I and II in the gaseous phase gave 74% IV, the mononitrate being 63%. Improved yields were obtained by the use of dehydration catalysts, e.g., silica gel. Refluxing II and V 1 h. gave 20% condensed products; heating V at 50° 1 h. gave VII, probably because of moisture, and condensed products; refluxing II and VII 1 hr. gave 30% condensed products. Heating V and VIII 40 min. at 100° and distilling gave V, VI, VII, and VIII. A mechanism was postulated. Treating VII and VIII with  $HNO_3H_2SO_4$  (50:50) gave  $(CH_2ONO_2)_2$  and  $O(CH_2CH_2ONO_2)_2$ . Treating VII with  $AcCl$  in the presence of  $C_5H_5N$  gave 65%  $AcOCH_2CH_2ONO_2$ , b0.7 69.0-9.5°, nD21 1.4290. Similarly VIII gave  $AcOCH_2CH_2OCH_2CH_2ONO_2$ , b0.1 90°, nD20 1.4410. VII and phthalic anhydride at 220° gave a small amount of liquid, b. 95°, which contained the  $ONO_2$  group and which polymerized within 24 h. Treating VII with  $AcOH-CrO_3$  gave  $O_2NOCH_2CO_2Me$ , b16 75°, nD15 1.4221. Treating VII with  $Me_2SO_4$  and

K2CO3 1 h. at 80-90° gave 10% O2NOCH2CH2OMe, b15 56-60°, nD20 1.415. III added dropwise to 75% I in CHCl3 or Et2O at -5° gave 75% oil, which on distillation gave: nitrite nitrate of propanediol (2 possible isomers) (IX), b22 68-70°, b15 58-9°, nD19 1.4205, d21 1.256; nitrite nitrate of dipropylene glycol (4 possible isomers) (X), b0.3 71-82°, nD20 1.4325; mononitrate of propanediol (2 possible isomers) (XI), b0.1 60-1°, nD19 1.4370, d21 1.234; mononitrate of dipropylene glycol (4 possible isomers) (XII), b0.1 79-80°, nD19 1.4420. Similarly to II, III condensed with IX at 40°; heating this nitrite nitrate 1 h. at 75° gave 31% XI. Nitration of MeCH(OH)CH2OH and of XI gave MeCH(ONO2)CH2ONO2, b0.5 59-60, nD17 1.4475. Nitration of dipropylene glycol and of its mononitrate gave the same dinitrate (2 possible isomers), b0.1 100°, nD15 1.4460, d21 1.2310. Acetylation of XI gave an oil containing a mixture of 2 possible isomers, b16 90°, b0.1 51-3°, nD17 1.4272. Treatment of XI with AcOH-CrO3 gave an oil which on treatment with MeOH in the presence of H2SO4 gave MeCH(ONO2)CO2Me, b16 70-1°, nD19 1.4180, also obtained by nitration of MeCH(OH)CO2Me. Nitration of AcCH2OH in AcOH-CrO3 gave AcCH2ONO2, b0.1 55-63°, nD20 1.431. Treatment of CH:CCH2OH with AcOH in the presence of Hg++ and BF3 in Et2O gave AcCH2OAc, which on hydrogenation over Raney Ni gave MeCH(OH)CH2OAc, and subsequent nitration gave MeCH(ONO2)CH2OAc, b0.1 52-3°, nD17 1.4272. Bromination of EtCHO, treatment of MeCH-BrCHO with KI, acetylation of MeCHICHCHO with AcOAg, hydrogenation of MeCH(OAc)CHO over Raney Ni, and nitration of MeCH(OAc)CH2OH yielded MeCH(OAc)CH2ONO2, b0.1 48-9°, nD17 1.4268. By means of absorption spectra, it was estimated that IX contained 20% secondary alc. and 80% primary alc.

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ACCESSION NUMBER: 1957:62089 HCAPLUS

DOCUMENT NUMBER: 51:62089

ORIGINAL REFERENCE NO.: 51:11243d-i,11244a-b

TITLE: Addition of alcohols to octafluoroisobutene

AUTHOR(S): Koshar, Robert J.; Simmons, Thomas C.; Hoffmann, Friedrich W.

CORPORATE SOURCE: Army Chem. Center, MD

SOURCE: Journal of the American Chemical Society (1957), 79, 1741-4

CODEN: JACSAT; ISSN: 0002-7863

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

AB A gas mixture containing 51 mole-% (CF3)2C:CF2 (I), 27 mole-% octafluorocyclobutane (II), 11.3 mole-% CF3CF:CF2, and 1.5 mole-% hexafluorocyclobutene selectively brominated by the method of Brice, et al. (C.A. 48, 7534i), yielded crude I accompanied by approx. 55% II and other saturated fluorocarbons; this crude I was used in most expts. (CF3)2CBrCF2Br, b. 96°, m. 46°, debrominated in Et2O with Zn by the method of Brice, et al. (loc. cit.), yielded pure I. Pure I (or crude I containing about 45 mole-% I) passed through a 3-mole excess of the appropriate alc. at room temperature at an average flow rate of 0.1 mole I/hr., the

system purged with N to remove unreacted I, the mixture washed several times with H2O, and the organic layer dried and distilled gave the corresponding (CF3)2CHCF2OR (III) and (CF3)2C:CFOR (IV) (R, conversion of I, % yield, b.p./mm., nD25, d25, and MRD of III, and % yield, b.p./mm., nD25, d25, and MRD of IV given): Me, 95, 70, 68.5°/760, 1.2809, 1.4931, 27.35, 0, -, -, -, -; Et, 95, 59, 82.0°/760, 1.2909, 1.3982, 32.01, 6,

114.0°/760, 1.3234, 1.3995, 32.36; Pr, 77, 43, 101.5°/760, 1.3047, 1.3463, 36.67, 14, 129.8°/760, 1.3345, 1.339, 37.02; Bu, 70, 52, 53.5°/65, 1.3172, 1.3037, 41.35, 27, 75.0°/53, 1.3449, 1.2933, 41.71; iso-Pr, 80, 35, 43.5°/113, 1.3005, 1.323, 36.75, 26, 45.0°/50, 1.3302, 1.322, 37.04. Cl(CH<sub>2</sub>)<sub>2</sub>OH (64 g.) neutralized with 1.5 g. Et<sub>3</sub>N and treated in the usual manner with 133 g. crude I gave: 54.7 g. H<sub>2</sub>O-insol. product; 50 g. product fractionated gave 29.5 g. (CF<sub>3</sub>)<sub>2</sub>CHCF<sub>2</sub>O(CH<sub>2</sub>)<sub>2</sub>Cl, b<sub>160</sub> 73.5-4.0°, n<sub>D</sub>25 1.3292, d<sub>25</sub> 1.5364, MRD 37.07; 5.0 g. (CF<sub>3</sub>)<sub>2</sub>C:C(OCH<sub>2</sub>CH<sub>2</sub>Cl)<sub>2</sub> (V), b<sub>1.7</sub> 94°, b<sub>3.5</sub> 99.0°, n<sub>D</sub>25 1.4110. Pure I (40 g.) passed into 81 g. Cl(CH<sub>2</sub>)<sub>2</sub>OH and 10 g. Et<sub>3</sub>N below 40° yielded 20 g. unchanged alc. and 17.4 g. V, b<sub>3.5</sub> 99.0-9.5°, n<sub>D</sub>25 1.4110. Crude I (115 g.) passed into 68.4 g. CH<sub>2</sub>:CHCH<sub>2</sub>OH gave 52 g. crude H<sub>2</sub>O-insol. product; 45 g. product fractionated yielded 25 g. (CF<sub>3</sub>)<sub>2</sub>CHCF<sub>2</sub>OCH<sub>2</sub>CH:CH<sub>2</sub>, b<sub>760</sub> 100.0°, n<sub>D</sub>25D 1.3135, 1.3893, MRD 36.14, and 6 g. (CF<sub>3</sub>)<sub>2</sub>C:C(OCH<sub>2</sub>CH:CH<sub>2</sub>)<sub>2</sub>, b<sub>35</sub> 75.5°, b<sub>40</sub> 79°, n<sub>D</sub>25 1.3727, d<sub>25</sub> 1.270, MRD 49.46. F(CH<sub>2</sub>)<sub>2</sub>OH and I gave in the usual manner 60% (65% conversion) (CF<sub>3</sub>)<sub>2</sub>CHCF<sub>2</sub>OCH<sub>2</sub>CH<sub>2</sub>F, b<sub>100</sub> 64.0°, n<sub>D</sub>25 1.3018, d<sub>25</sub> 1.540, MRD 32.24. (CF<sub>3</sub>)<sub>2</sub>CHCF<sub>2</sub>OMe (VI) (35 g.) and 100 cc. 15% aqueous KOH refluxed 20 hrs. at 100°, the organic phase dissolved in Et<sub>2</sub>O, washed with H<sub>2</sub>O, dried, and evaporated, and the H<sub>2</sub>O-insol. residue (26.9 g.) fractionated yielded 7.0 g. unchanged VI and 15.0 g. (CF<sub>3</sub>)<sub>2</sub>C:CFOMe, b. 101.5-1.8°. (CF<sub>3</sub>)<sub>2</sub>CHCF<sub>2</sub>OPr (33 g.) and 150 cc. 15% aqueous KOH refluxed 25 hrs. gave similarly 18.0 g. (CF<sub>3</sub>)<sub>2</sub>C:CFOPr, b. 129-30°, n<sub>D</sub>25 1.3345. (CF<sub>3</sub>)<sub>2</sub>C:CFOEt (16 g.) added dropwise at room temperature to 12 g. Br with occasional shaking, poured into a large excess aqueous KOH, and shaken, and the crude organic layer (23 g.) worked up yielded 10.2 g. (CF<sub>3</sub>)<sub>2</sub>CB<sub>2</sub>BrFOEt, b<sub>35</sub> 75.5°, n<sub>D</sub>25 1.3906. (CF<sub>3</sub>)<sub>2</sub>CHCF<sub>2</sub>OBu (VII) (24.9 g.) and 40 g. BuOH refluxed 10 hrs., cooled, washed with H<sub>2</sub>O, dried, and distilled gave 21.5 g. unchanged VII. Na (2.3 g.) in 40-50 cc. absolute EtOH treated with 3.2 cc. H<sub>2</sub>O, diluted with absolute EtOH to 100 cc., treated with 0.1461 g. (CF<sub>3</sub>)<sub>2</sub>CHCF<sub>2</sub>OEt, and kept 30 hrs. at 24°, and the fluoride ion titrated indicated 93.4% cleavage of all C-F bonds. (CF<sub>3</sub>)<sub>2</sub>C:CFOEt (0.1935 g.) liberated similarly during 19 hrs. at 24° 104.8 mg. fluoride ion corresponding to 92.1% decomposition

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(FILE 'HOME' ENTERED AT 21:58:13 ON 20 SEP 2007)

FILE 'REGISTRY' ENTERED AT 21:58:34 ON 20 SEP 2007

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L1          STRUCTURE UPLOADED
L2          15 S L1
L3          274 S L1 SSS FULL
L4          STRUCTURE UPLOADED
L5          1 S L4
L6          3 S L4 SSS FULL
L7          0 S L3 SUB=L6 FULL
L8          STRUCTURE UPLOADED
L9          0 S L8
L10         2 S L8 SSS FULL
L11         0 S L3 SUB=L10 FULL
L12         0 S L10 SUB=L3 FULL

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FILE 'HCAPLUS' ENTERED AT 22:02:54 ON 20 SEP 2007

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L13         45 S L3

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=> d l13 1-45 ti

- L13 ANSWER 1 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN  
TI Preparation of nitrooxy derivatives as  $\alpha$ 2 adrenergic receptor agonists
- L13 ANSWER 2 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN  
TI Preparation of nitrooxy-comprising derivatives of apraclonidine and brimonidine as  $\alpha$ 2-adrenergic receptor agonists
- L13 ANSWER 3 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN  
TI Preparation of nitrooxy peptidomimetic renin inhibitors for treating cardiovascular, renal and chronic liver diseases, inflammations and metabolic syndrome
- L13 ANSWER 4 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN  
TI Preparation of steroid nitrooxy derivatives for use in anti-inflammatory pharmaceutical compositions
- L13 ANSWER 5 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN  
TI Pharmaceutical formulation of nitrooxy derivatives of NSAIDS
- L13 ANSWER 6 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN  
TI Prostaglandin derivatives
- L13 ANSWER 7 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN  
TI Preparation of nitrooxy sartan derivatives as angiotensin ii receptor blockers for the treatment of cardiovascular and inflammatory diseases
- L13 ANSWER 8 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN  
TI Identification of a trace colored impurity in drug substance by preparative liquid chromatography and mass spectrometry
- L13 ANSWER 9 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN  
TI Synthesis of a NO-Releasing Prodrug of Rofecoxib
- L13 ANSWER 10 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN  
TI Process for making nitric oxide releasing prodrugs of diaryl-2-(5H)-furanones as cyclooxygenase-2 inhibitors
- L13 ANSWER 11 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN  
TI Preparation of nitric oxide releasing prodrugs of diaryl-2(5H)-furanones as cyclooxygenase-2 inhibitors
- L13 ANSWER 12 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN  
TI Preparation of prostaglandin nitrooxy derivatives for the treatment of glaucoma
- L13 ANSWER 13 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN  
TI Nitric oxide-releasing pyruvate compounds, compositions and methods for treating cardiovascular and other diseases
- L13 ANSWER 14 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN  
TI Preparation of nitrate esters having a  $\beta$ - or  $\gamma$ -sulfur atom for protection of cells/tissues from oxidative damage.

- L13 ANSWER 15 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN  
TI Nitrosylated analgesic and/or antiinflammatory drugs having antiviral activity
- L13 ANSWER 16 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN  
TI Preparation of nitrosated glutamic acid compounds for use in pharmaceutical compositions
- L13 ANSWER 17 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN  
TI Preparation of nitro derivatives of heterocyclic compounds as angiotensin II receptor blockers for therapeutic use
- L13 ANSWER 18 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN  
TI Pharmaceutical compositions based on diclofenac derivative
- L13 ANSWER 19 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN  
TI Enalapril-nitroxy derivatives and related compounds as ace inhibitors for the treatment of cardiovascular diseases
- L13 ANSWER 20 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN  
TI Preparation of nitrooxy derivatives of fluvastatin, pravastatin, cerivastatin, atorvastatin and rosuvastatin as cholesterol-reducing agents with improved anti-inflammatory, antithrombotic and anti-platelet activity
- L13 ANSWER 21 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN  
TI Preparation of nitric oxide releasing prodrugs of diaryl-2-(5H)-furanones as selective cyclooxygenase-2 inhibitors
- L13 ANSWER 22 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN  
TI Manufacturing process for NO-donating compounds such as NO-donating diclofenac
- L13 ANSWER 23 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN  
TI Preparation of nitrosated nonsteroidal antiinflammatory compounds
- L13 ANSWER 24 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN  
TI Oral pharmaceutical liquid drugs containing nitrate ester NSAIDs having improved bioavailability
- L13 ANSWER 25 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN  
TI Nitrosated and/or nitrosylated cyclooxygenase-2 selective inhibitors, compositions and methods of use
- L13 ANSWER 26 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN  
TI Nitrooxy derivatives of antiinflammatory/analgesic compounds for the treatment of arthritis
- L13 ANSWER 27 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN  
TI Nitric oxide-donating NSAIDs adsorbed into carrier particles
- L13 ANSWER 28 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN  
TI Preparation of nitrate prodrugs able to release nitric oxide in a controlled and selective way and their use for prevention and treatment of inflammatory, ischemic and proliferative diseases
- L13 ANSWER 29 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN  
TI Nitric oxide-donating non-steroidal anti-inflammatory drugs: the case of

nitro derivatives of aspirin

- L13 ANSWER 30 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN  
TI Self emulsifying drug delivery system containing NSAIDs
- L13 ANSWER 31 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN  
TI Pharmaceutical compositions containing NO-releasing NSAID and surfactants
- L13 ANSWER 32 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN  
TI New self emulsifying drug delivery system
- L13 ANSWER 33 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN  
TI Synthesis, activity and formulations of pharmaceutical compounds for treatment of oxidative stress and/or endothelial dysfunction
- L13 ANSWER 34 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN  
TI New use of compounds as antibacterial agents
- L13 ANSWER 35 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN  
TI Thermal stability of peroxy nitrates
- L13 ANSWER 36 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN  
TI Preparation of nitric esters of 2-(2,6-dihalophenylamino)phenylacetoxycetic acid derivatives
- L13 ANSWER 37 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN  
TI Preparation of aryl nitrate ester compounds having antiinflammatory and well as analgesic and antithrombotic activities
- L13 ANSWER 38 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN  
TI Kinetic studies of peroxy nitrates and peroxy radicals
- L13 ANSWER 39 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN  
TI Nitroacetic acid ester
- L13 ANSWER 40 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN  
TI Substituted nitroalkyl peroxy nitrate
- L13 ANSWER 41 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN  
TI Propellants of pulsed combustion
- L13 ANSWER 42 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN  
TI Solid propellants with pulsatory characteristics
- L13 ANSWER 43 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN  
TI 1-Nitro-2-nitratopropanes
- L13 ANSWER 44 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN  
TI Action of nitrogen peroxides on epoxides
- L13 ANSWER 45 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN  
TI Addition of alcohols to octafluoroisobutene

=> d 113 1-45 hitstr

L13 ANSWER 1 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN



10/522986 NITROOXYALKYL SUBTD ESTERS

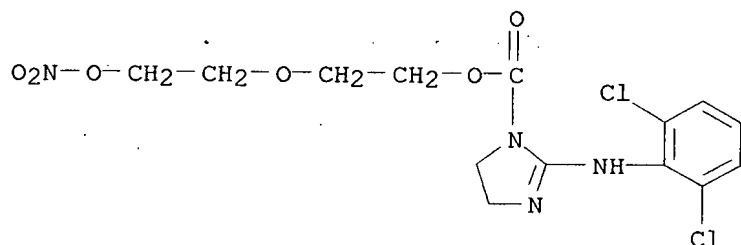
IT 946403-81-2P 946403-96-9P 946404-19-9P  
 946404-41-7P 946404-55-3P 946404-60-0P  
 946404-96-2P 946405-27-2P 946405-52-3P  
 946405-67-0P 946405-82-9P 946405-97-6P  
 946406-12-8P 946406-24-2P 946406-25-3P  
 946406-28-6P 946406-31-1P 946406-32-2P  
 946406-35-5P 946406-36-6P 946406-39-9P  
 946406-40-2P 946406-43-5P 946406-44-6P  
 946406-47-9P 946406-48-0P 946406-51-5P  
 946406-52-6P 946406-55-9P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU  
 (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES  
 (Uses)

(preparation of nitrooxy derivs. as  $\alpha 2$  adrenergic receptor agonists)

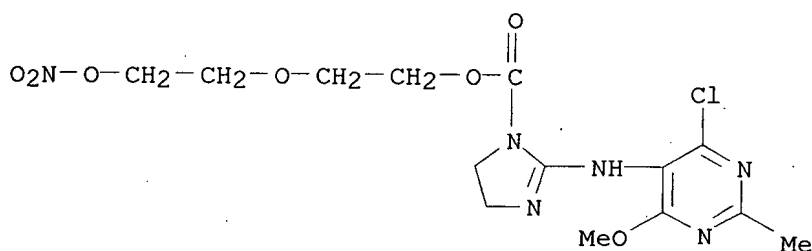
RN 946403-81-2 HCAPLUS

CN 1H-Imidazole-1-carboxylic acid, 2-[(2,6-dichlorophenyl)amino]-4,5-dihydro-  
 , 2-[2-(nitrooxy)ethoxy]ethyl ester (CA INDEX NAME)



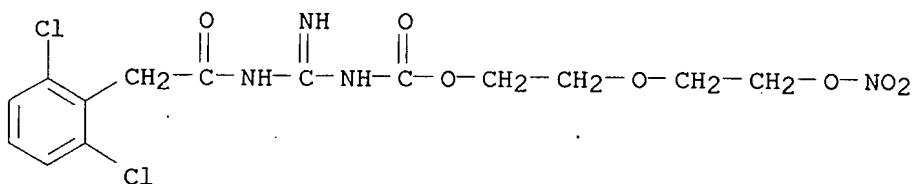
RN 946403-96-9 HCAPLUS

CN 1H-Imidazole-1-carboxylic acid, 2-[(4-chloro-6-methoxy-2-methyl-5-pyrimidinyl)amino]-4,5-dihydro-, 2-[2-(nitrooxy)ethoxy]ethyl ester (CA INDEX NAME)



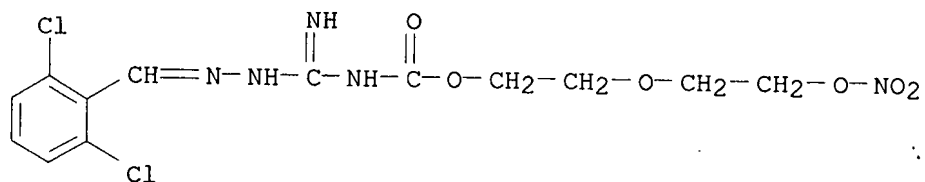
RN 946404-19-9 HCAPLUS

CN INDEX NAME NOT YET ASSIGNED

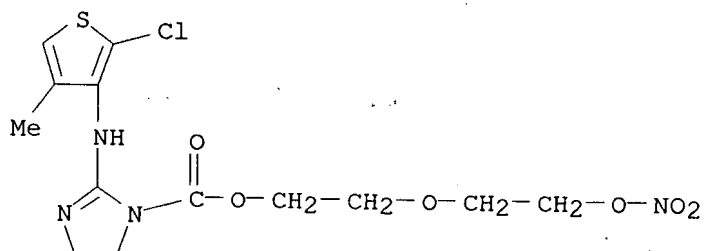


10/522986 NITROOXYALKYL SUBTD ESTERS

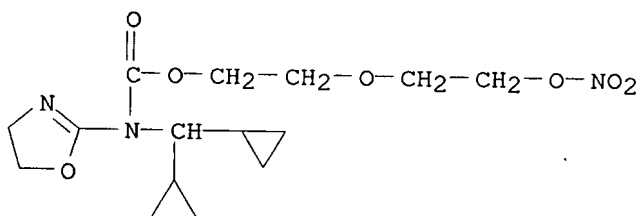
RN 946404-41-7 HCAPLUS  
CN INDEX NAME NOT YET ASSIGNED



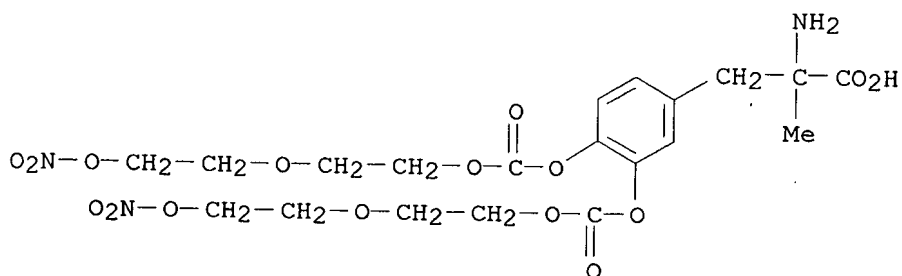
RN 946404-55-3 HCAPLUS  
CN 1H-Imidazole-1-carboxylic acid, 2-[(2-chloro-4-methyl-3-thienyl)amino]-4,5-dihydro-, 2-[2-(nitrooxy)ethoxy]ethyl ester (CA INDEX NAME)



RN 946404-60-0 HCAPLUS  
CN INDEX NAME NOT YET ASSIGNED

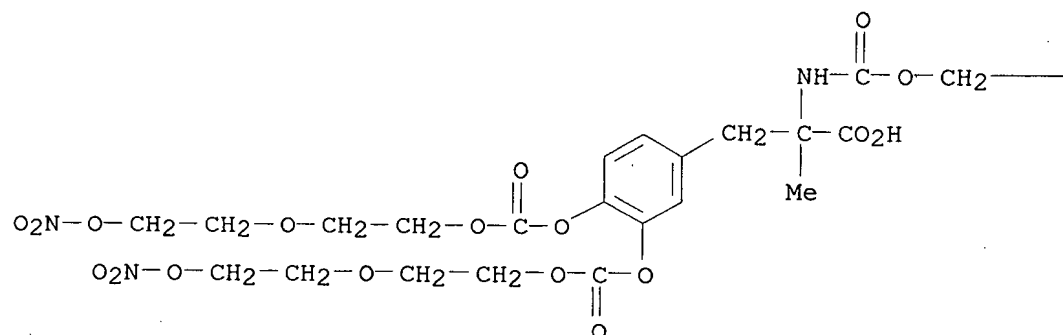


RN 946404-96-2 HCAPLUS  
CN Tyrosine,  $\alpha$ -methyl-O-[[2-[2-(nitrooxy)ethoxy]ethoxy]carbonyl]-3-[[[2-[2-(nitrooxy)ethoxy]ethoxy]carbonyl]oxy]- (CA INDEX NAME)

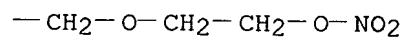


RN 946405-27-2 HCAPLUS  
CN INDEX NAME NOT YET ASSIGNED

PAGE 1-A

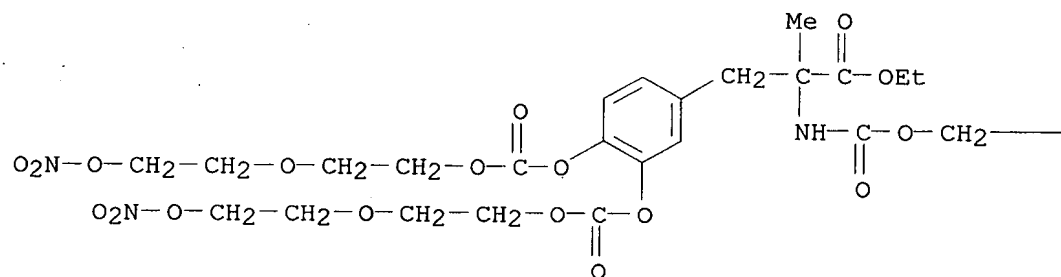


PAGE 1-B

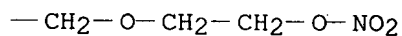


RN 946405-52-3 HCAPLUS  
CN INDEX NAME NOT YET ASSIGNED

PAGE 1-A

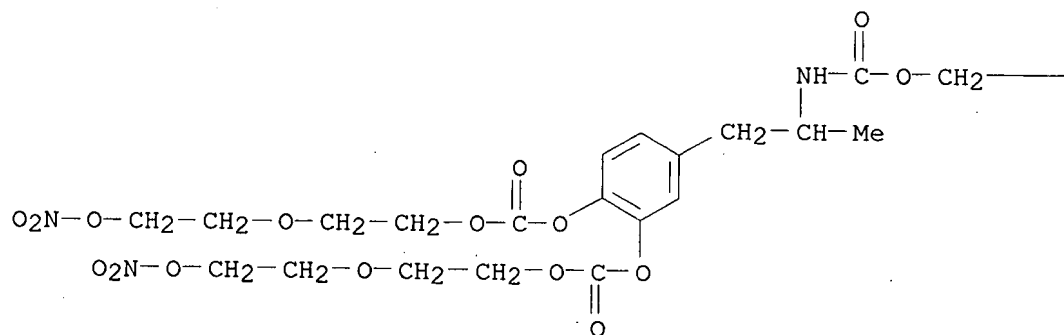


PAGE 1-B

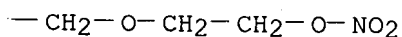


RN 946405-67-0 HCAPLUS  
CN INDEX NAME NOT YET ASSIGNED

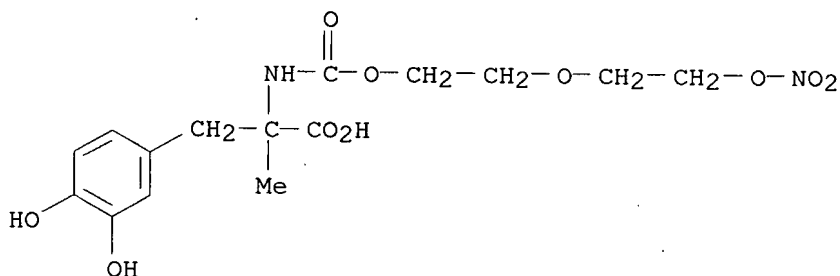
PAGE 1-A



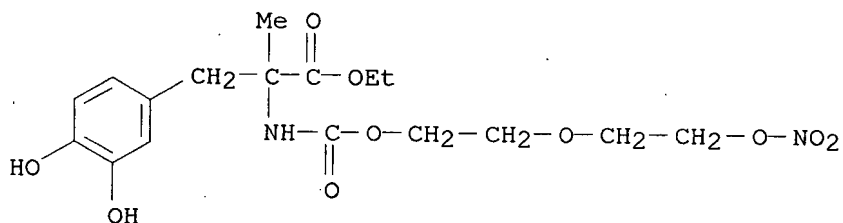
PAGE 1-B



RN 946405-82-9 HCAPLUS

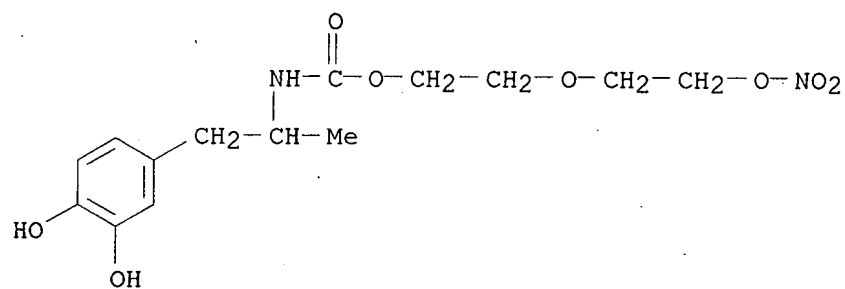
CN Tyrosine, 3-hydroxy- $\alpha$ -methyl-N-[[2-[2-(nitrooxy)ethoxy]ethoxy]carbonyl]- (CA INDEX NAME)

RN 946405-97-6 HCAPLUS

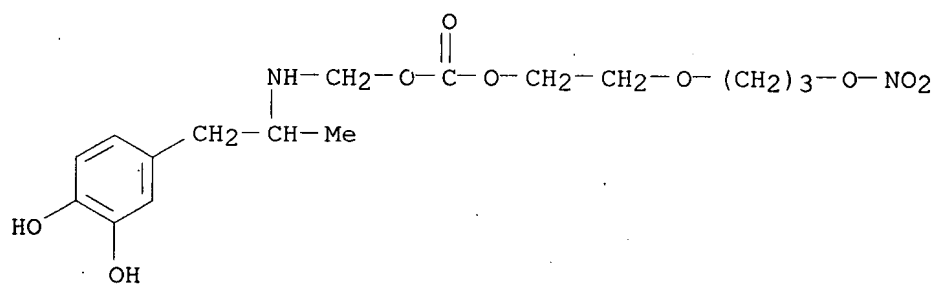
CN Tyrosine, 3-hydroxy- $\alpha$ -methyl-N-[[2-[2-(nitrooxy)ethoxy]ethoxy]carbonyl]-, ethyl ester (CA INDEX NAME)

RN 946406-12-8 HCAPLUS

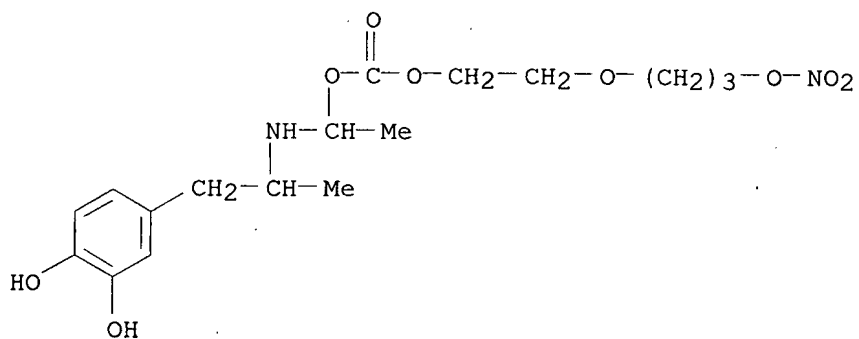
CN INDEX NAME NOT YET ASSIGNED



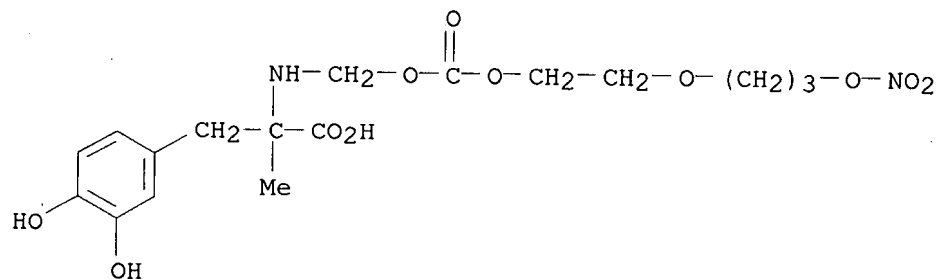
RN 946406-24-2 HCAPLUS  
CN INDEX NAME NOT YET ASSIGNED



RN 946406-25-3 HCAPLUS  
CN INDEX NAME NOT YET ASSIGNED

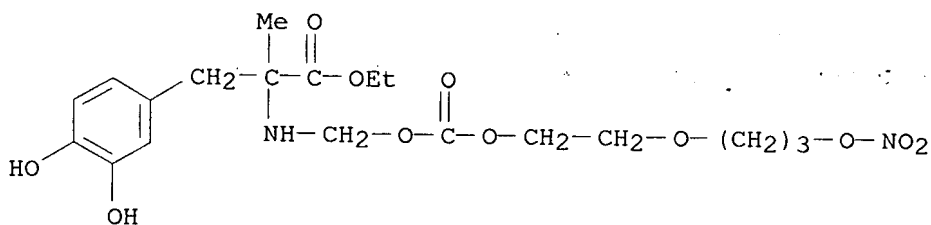


RN 946406-28-6 HCAPLUS  
CN Tyrosine, 3-hydroxy-α-methyl-N-[[[2-[3-(nitrooxy)propoxy]ethoxy]carbonyl]oxy]methyl]- (CA INDEX NAME)



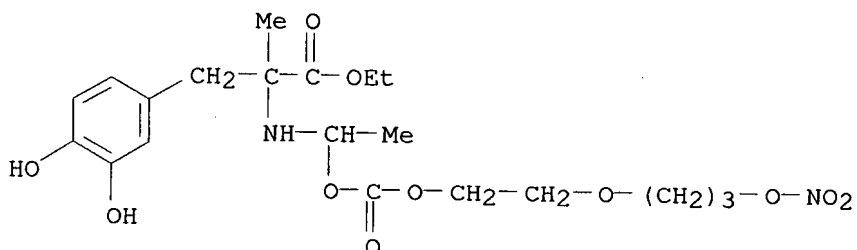
RN 946406-31-1 HCAPLUS

CN Tyrosine, 3-hydroxy-α-methyl-N-[[[2-[3-(nitrooxy)propoxy]ethoxy]carbonyl]oxy]methyl]-, ethyl ester (CA INDEX NAME)



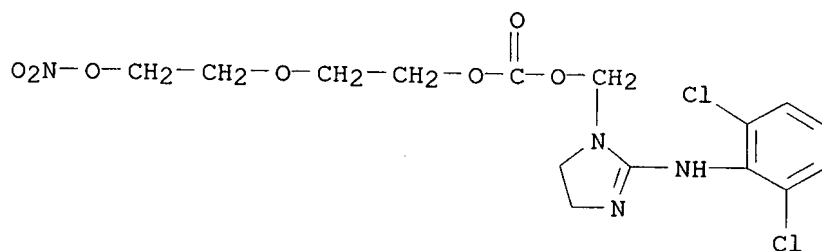
RN 946406-32-2 HCAPLUS

CN INDEX NAME NOT YET ASSIGNED



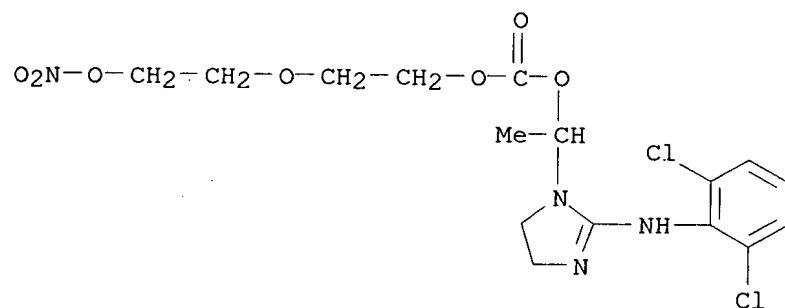
RN 946406-35-5 HCAPLUS

CN INDEX NAME NOT YET ASSIGNED

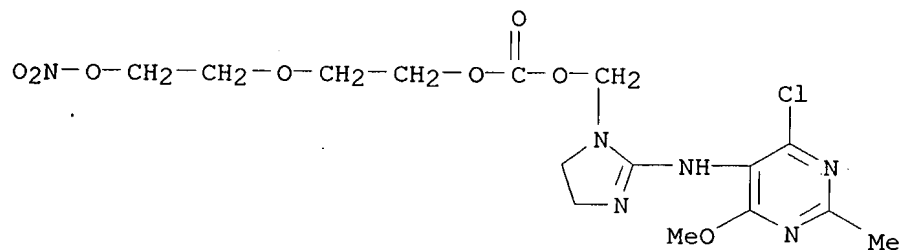


10/522986 NITROOXYALKYL SUBTD ESTERS

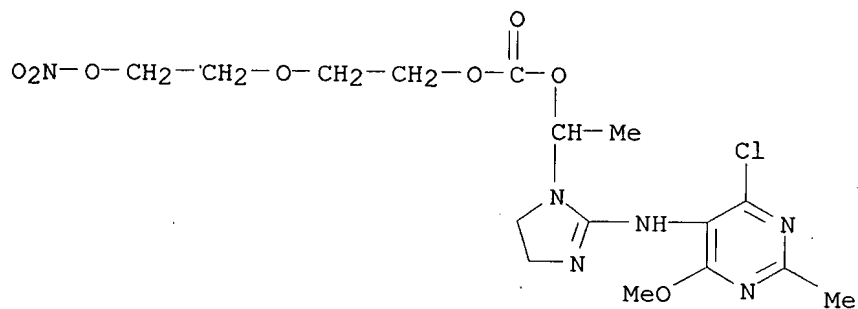
RN 946406-36-6 HCAPLUS  
CN INDEX NAME NOT YET ASSIGNED



RN 946406-39-9 HCAPLUS  
CN INDEX NAME NOT YET ASSIGNED



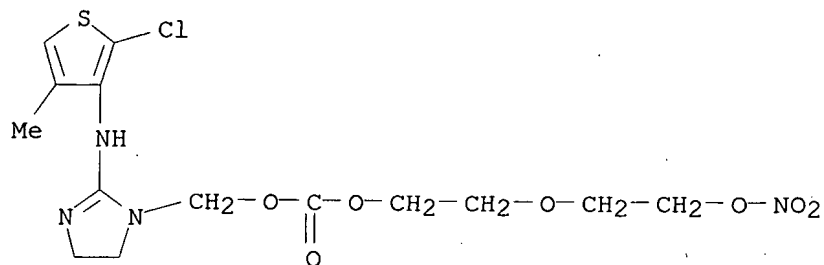
RN 946406-40-2 HCAPLUS  
CN INDEX NAME NOT YET ASSIGNED



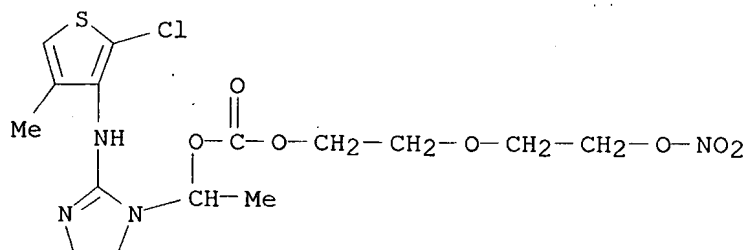
RN 946406-43-5 HCAPLUS  
CN INDEX NAME NOT YET ASSIGNED



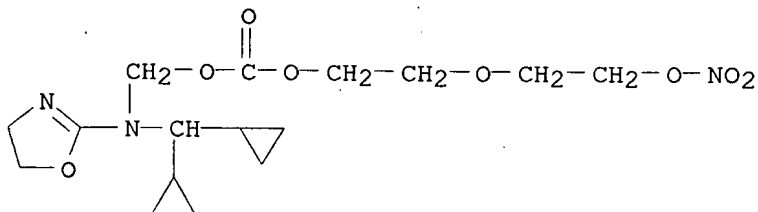




RN 946406-52-6 HCAPLUS  
CN INDEX NAME NOT YET ASSIGNED



RN 946406-55-9 HCAPLUS  
CN INDEX NAME NOT YET ASSIGNED



L13 ANSWER 2 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN

IT 946393-04-0P 946393-23-3P 946393-40-4P  
946393-42-6P 946393-62-0P 946393-63-1P

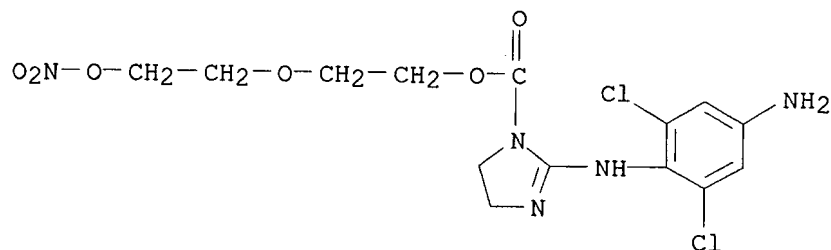
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU  
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES  
(Uses)

(preparation of nitrooxy-comprising derivs. of apraclonidine and brimonidine  
as  $\alpha$ 2-adrenergic receptor agonists)

RN 946393-04-0 HCAPLUS

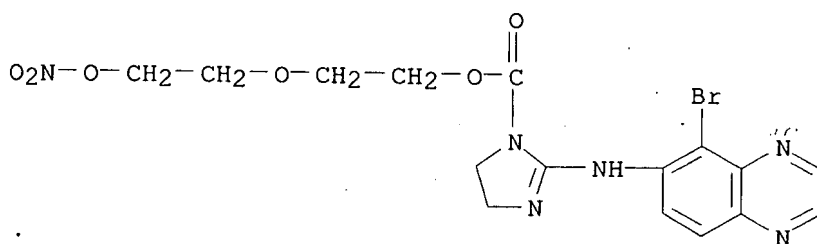
CN 1H-Imidazole-1-carboxylic acid, 2-[(4-amino-2,6-dichlorophenyl)amino]-4,5-  
dihydro-, 2-[2-(nitrooxy)ethoxy]ethyl ester (CA INDEX NAME)

10/522986 NITROOXYALKYL SUBTD ESTERS



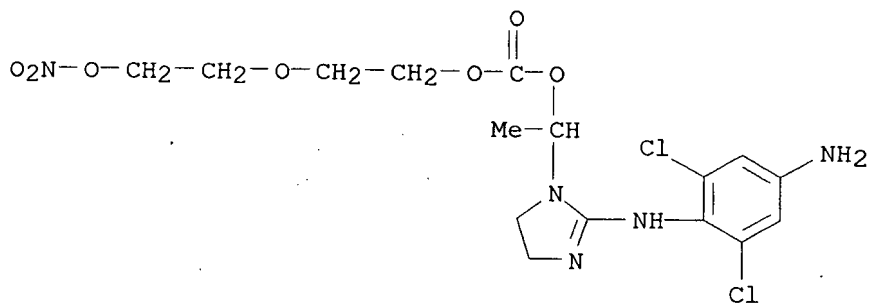
RN 946393-23-3 HCAPLUS

CN 1H-Imidazole-1-carboxylic acid, 2-[(5-bromo-6-quinoxaliny)amino]-4,5-dihydro-, 2-[2-(nitrooxy)ethoxy]ethyl ester (CA INDEX NAME)



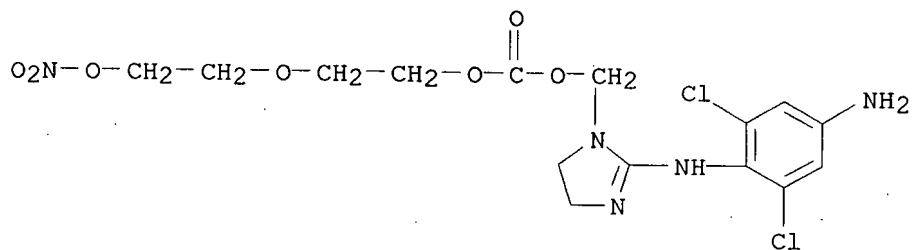
RN 946393-40-4 HCAPLUS

CN INDEX NAME NOT YET ASSIGNED



RN 946393-42-6 HCAPLUS

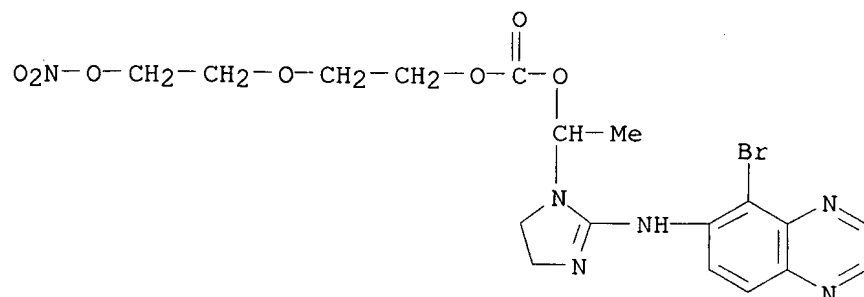
CN INDEX NAME NOT YET ASSIGNED



10/522986 NITROOXYALKYL SUBTD ESTERS

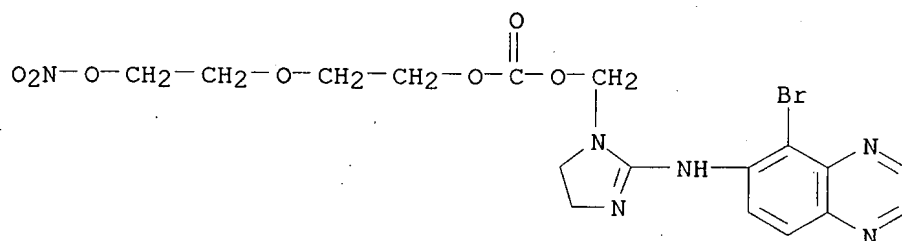
RN 946393-62-0 HCAPLUS

CN INDEX NAME NOT YET ASSIGNED



RN 946393-63-1 HCAPLUS

CN INDEX NAME NOT YET ASSIGNED



L13 ANSWER 3 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN

IT 935472-19-8P 935472-35-8P 935472-41-6P

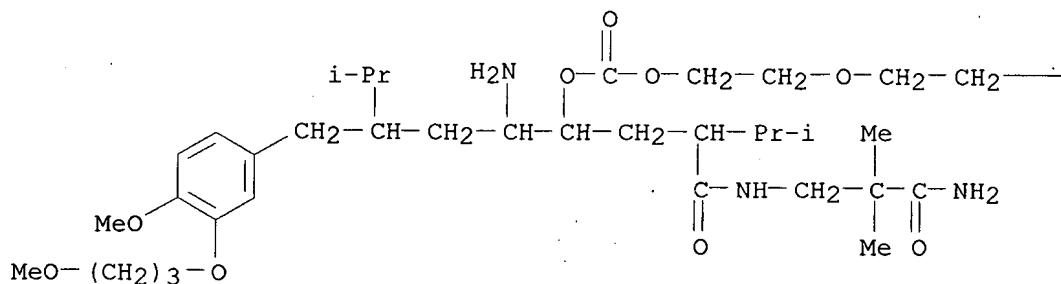
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of nitrooxy peptidomimetic renin inhibitors useful in combination therapy and prevention of diseases)

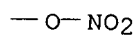
RN 935472-19-8 HCAPLUS

CN Carbonic acid, 2-amino-1-[2-[[ (3-amino-2,2-dimethyl-3-oxopropyl)amino]carbonyl]-3-methylbutyl]-4-[[4-methoxy-3-(3-methoxypropoxy)phenyl]methyl]-5-methylhexyl [2-[2-(nitrooxy)ethoxy]ethyl] ester (CA INDEX NAME)

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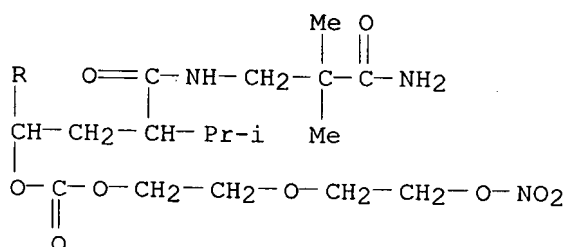
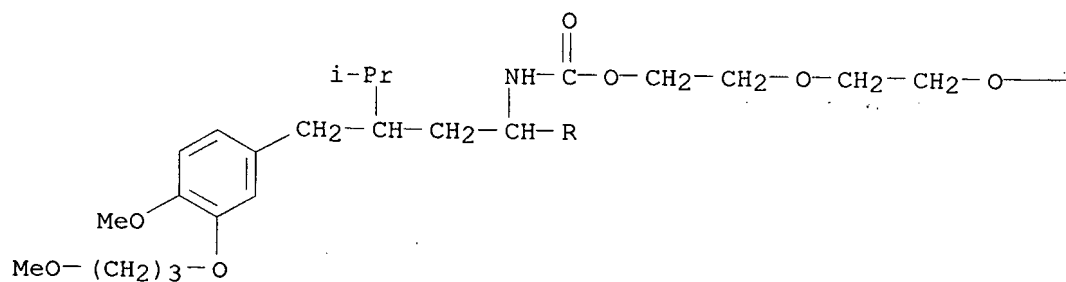


PAGE 1-B



RN 935472-35-8 HCAPLUS  
 CN 2,7,10-Trioxa-5-azadodecanoic acid, 3-[2-[[[(3-amino-2,2-dimethyl-3-oxopropyl)amino]carbonyl]-3-methylbutyl]-4-[2-[[4-methoxy-3-(3-methoxypropoxy)phenyl]methyl]-3-methylbutyl]-12-(nitrooxy)-6-oxo-, 2-[2-(nitrooxy)ethoxy]ethyl ester (CA INDEX NAME)

PAGE 1-A

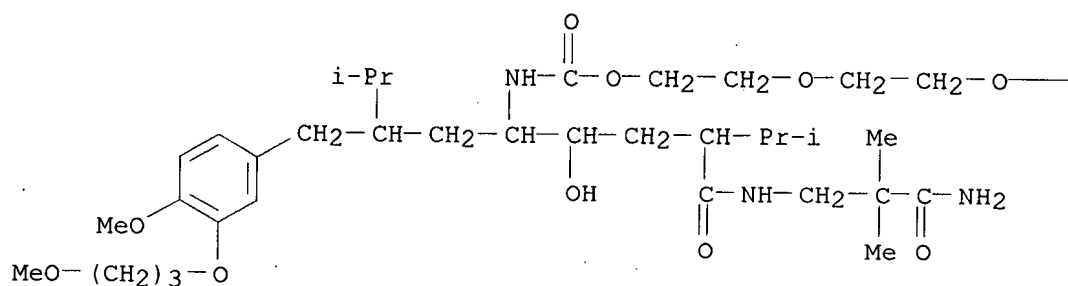


PAGE 1-B



RN 935472-41-6 HCAPLUS  
 CN Carbamic acid, N-[4-[[[(3-amino-2,2-dimethyl-3-oxopropyl)amino]carbonyl]-2-hydroxy-1-[2-[[4-methoxy-3-(3-methoxypropoxy)phenyl]methyl]-3-methylbutyl]-5-methylhexyl]-, 2-[2-(nitrooxy)ethoxy]ethyl ester (CA INDEX NAME)

PAGE 1-A



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-NO<sub>2</sub>

L13 ANSWER 4 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN

IT 928623-94-3P 928624-14-0P 928624-34-4P

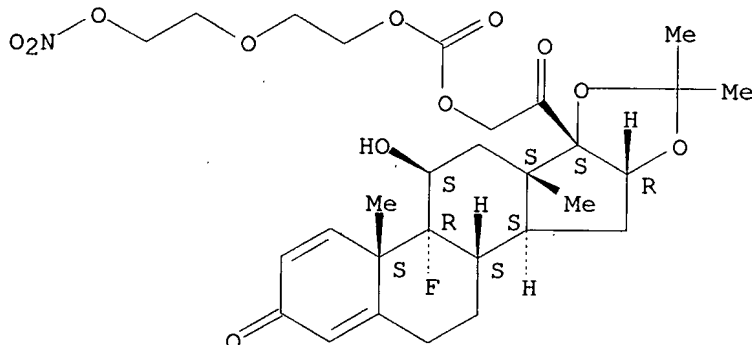
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(claimed compound; preparation of steroid nitrooxy derivs. for use in anti-inflammatory pharmaceutical compns.)

RN 928623-94-3 HCAPLUS

CN Pregna-1,4-diene-3,20-dione, 9-fluoro-11-hydroxy-16,17-[(1-methylethylidene)bis(oxy)]-21-[[[2-[2-(nitrooxy)ethoxy]ethoxy]carbonyl]oxy]-, (11 $\beta$ ,16 $\alpha$ )- (CA INDEX NAME)

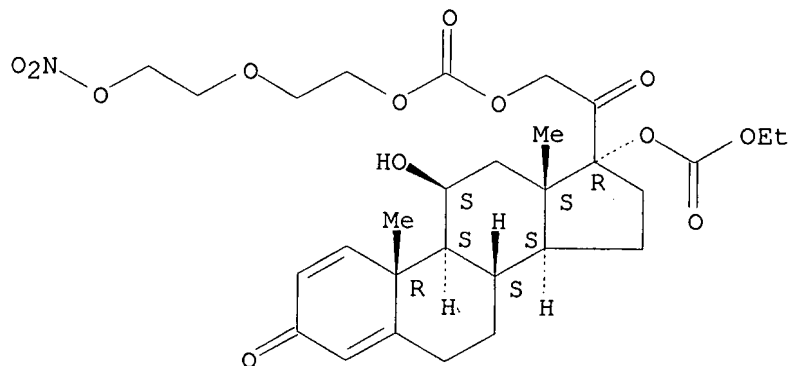
Absolute stereochemistry.



RN 928624-14-0 HCAPLUS

CN Pregna-1,4-diene-3,20-dione, 17-[(ethoxycarbonyl)oxy]-11-hydroxy-21-[[[2-[2-(nitrooxy)ethoxy]ethoxy]carbonyl]oxy]-, (11 $\beta$ )- (CA INDEX NAME)

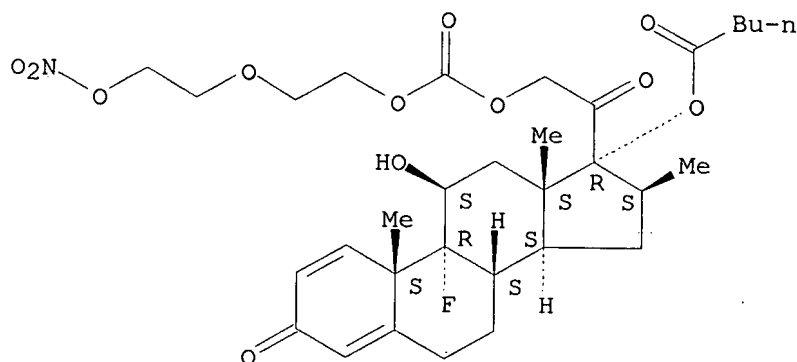
Absolute stereochemistry.



RN 928624-34-4 HCAPLUS

CN Pregna-1,4-diene-3,20-dione, 9-fluoro-11-hydroxy-16-methyl-21-[[[2-[2-(nitrooxy)ethoxy]ethoxy]carbonyl]oxy]-17-[(1-oxopentyl)oxy]-, (11 $\beta$ ,16 $\beta$ )- (CA INDEX NAME)

Absolute stereochemistry.



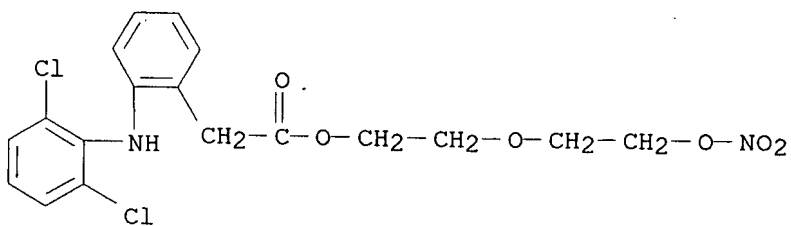
L13 ANSWER 5 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN

IT 174454-43-4 174454-51-4 311336-59-1

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(pharmaceutical formulation of nitrooxy derivs. of NSAIDS)

RN 174454-43-4 HCAPLUS

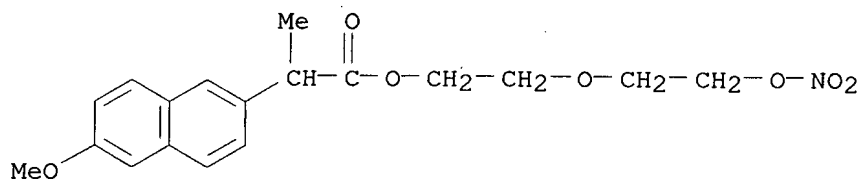
CN Benzeneacetic acid, 2-[(2,6-dichlorophenyl)amino]-, 2-[2-(nitrooxy)ethoxy]ethyl ester (CA INDEX NAME)



10/522986 NITROOXYALKYL SUBTD ESTERS

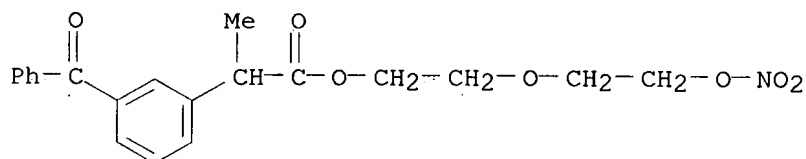
RN 174454-51-4 HCAPLUS

CN 2-Naphthaleneacetic acid, 6-methoxy- $\alpha$ -methyl-, 2-[2-(nitrooxy)ethoxy]ethyl ester (CA INDEX NAME)



RN 311336-59-1 HCAPLUS

CN Benzeneacetic acid, 3-benzoyl- $\alpha$ -methyl-, 2-[2-(nitrooxy)ethoxy]ethyl ester (CA INDEX NAME)



L13 ANSWER 6 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN

IT 918341-76-1P 918341-78-3P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

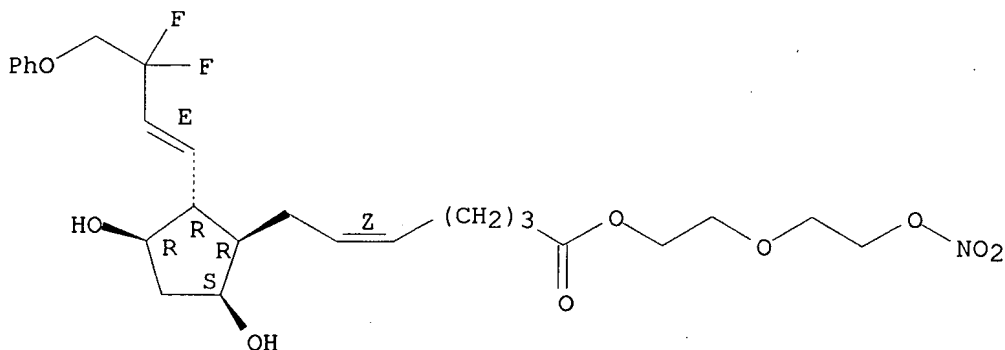
(claimed compound; preparation of prostaglandin derivs. containing a nitrooxy moiety for therapeutic use in the treatment of glaucoma and ocular hypertension)

RN 918341-76-1 HCAPLUS

CN 5-Heptenoic acid, 7-[(1R,2R,3R,5S)-2-[(1E)-3,3-difluoro-4-phenoxy-1-buten-1-yl]-3,5-dihydroxycyclopentyl]-, 2-[2-(nitrooxy)ethoxy]ethyl ester, (5Z)- (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.



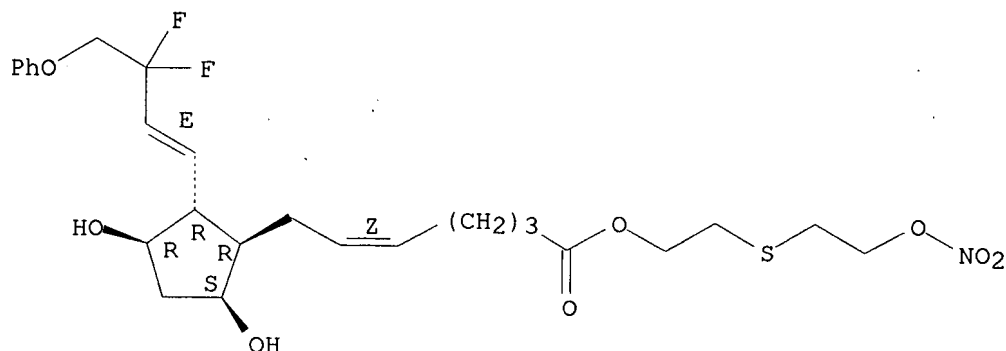
10/522986 NITROOXYALKYL SUBTD ESTERS

RN 918341-78-3 HCAPLUS

CN 5-Heptenoic acid, 7-[(1R,2R,3R,5S)-2-[(1E)-3,3-difluoro-4-phenoxy-1-buten-1-yl]-3,5-dihydroxycyclopentyl]-, 2-[[2-(nitrooxy)ethyl]thio]ethyl ester, (5Z)- (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.



L13 ANSWER 7 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN

IT 902123-41-5P 902123-42-6P 902123-61-9P

902123-62-0P 902123-63-1P 902123-64-2P

902124-01-0P 902124-02-1P 902124-03-2P

902124-04-3P 902124-06-5P 902124-07-6P

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902126-67-4P 902126-92-5P 902126-93-6P

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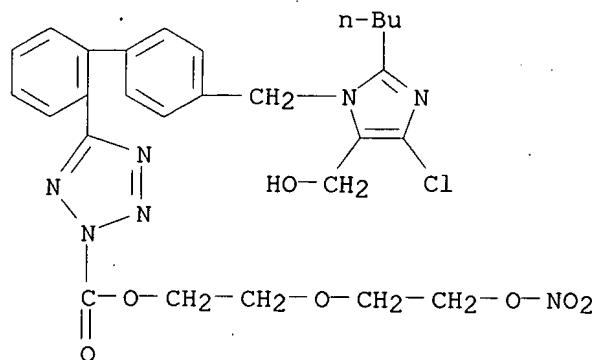
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of nitrooxy sartan derivs. as angiotensin ii receptor blockers for the treatment of cardiovascular and inflammatory diseases)

RN 902123-41-5 HCAPLUS

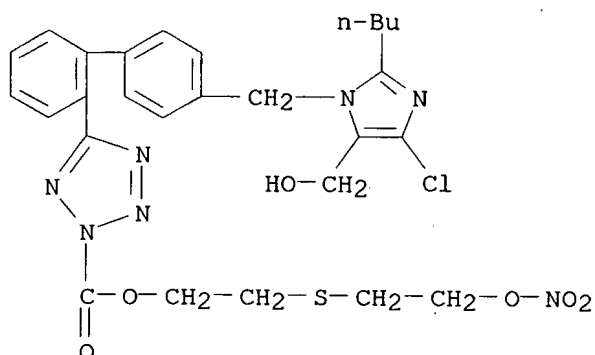
CN 2H-Tetrazole-2-carboxylic acid, 5-[4'-[[2-butyl-4-chloro-5-(hydroxymethyl)-1H-imidazol-1-yl]methyl][1,1'-biphenyl]-2-yl]-, 2-[2-(nitrooxy)ethoxy]ethyl ester (CA INDEX NAME)





RN 902123-42-6 HCAPLUS

CN 2H-Tetrazole-2-carboxylic acid, 5-[4'-[[2-butyl-4-chloro-5-(hydroxymethyl)-1H-imidazol-1-yl]methyl][1,1'-biphenyl]-2-yl]-, 2-[[2-(nitrooxy)ethyl]thio]ethyl ester (CA INDEX NAME)

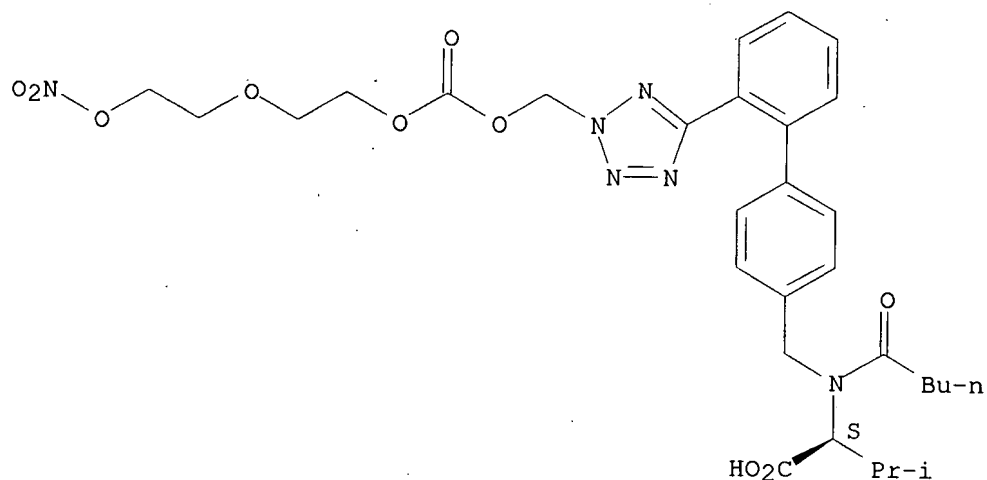


RN 902123-61-9 HCAPLUS

CN L-Valine, N-[[2'-[2-[[[2-[2-(nitrooxy)ethoxy]ethoxy]carbonyl]oxy]methyl]-2H-tetrazol-5-yl][1,1'-biphenyl]-4-yl]methyl]-N-(1-oxopentyl)- (CA INDEX NAME)

Absolute stereochemistry.

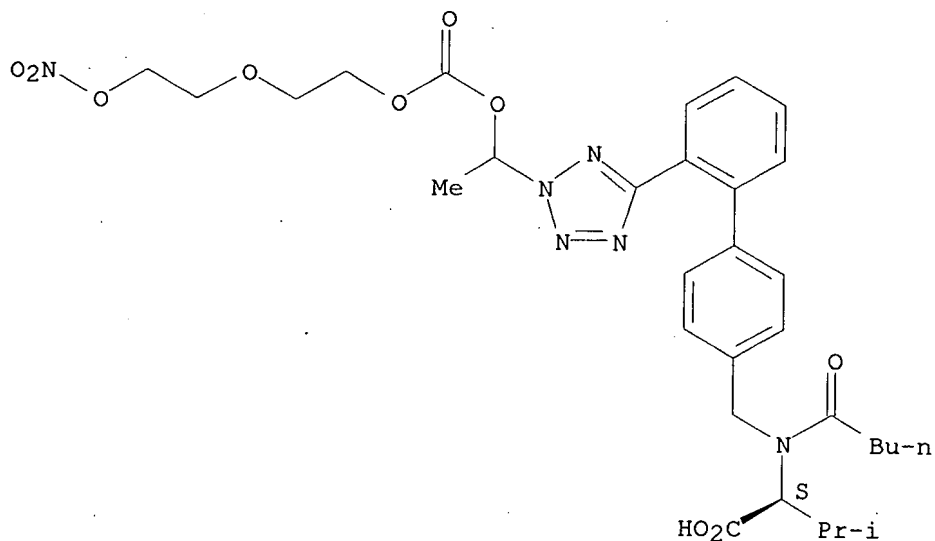
10/522986 NITROOXYALKYL SUBTD ESTERS



RN 902123-62-0 HCAPLUS

CN L-Valine, N-[[2'-[2-[1-[[[2-[2-(nitrooxy)ethoxy]ethoxy]carbonyl]oxy]ethyl]-2H-tetrazol-5-yl][1,1'-biphenyl]-4-yl]methyl]-N-(1-oxopentyl)- (CA INDEX NAME)

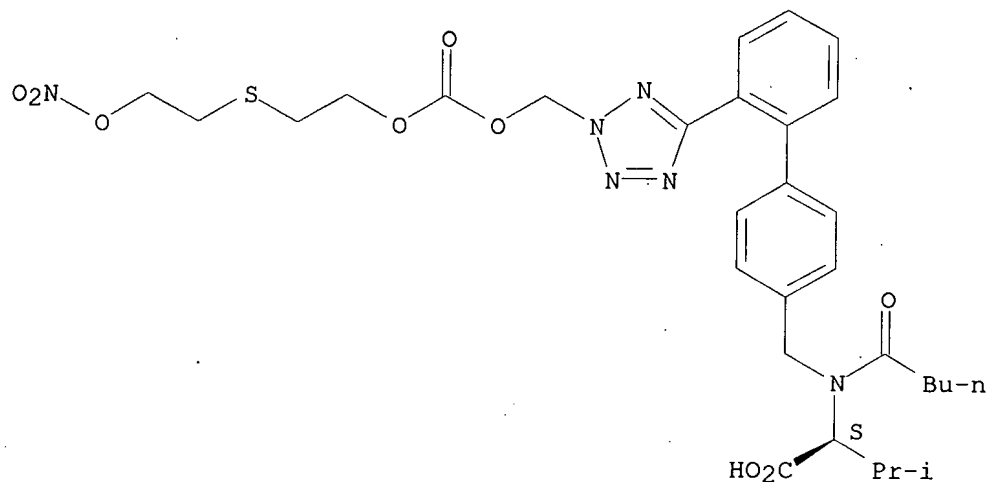
Absolute stereochemistry.



RN 902123-63-1 HCAPLUS

CN L-Valine, N-[[2'-[2-[[[2-[[2-(nitrooxy)ethyl]thio]ethoxy]carbonyl]oxy]methyl]-2H-tetrazol-5-yl][1,1'-biphenyl]-4-yl]methyl]-N-(1-oxopentyl)- (CA INDEX NAME)

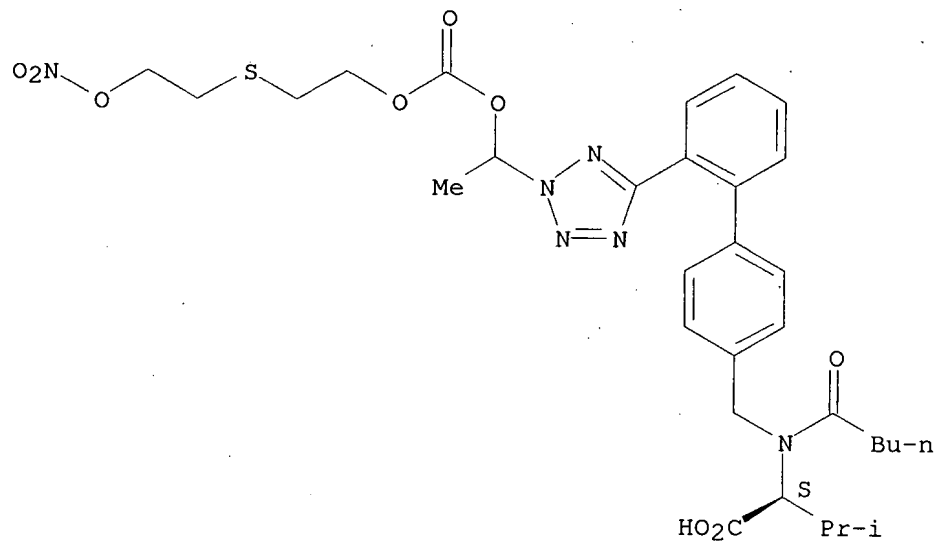
Absolute stereochemistry.



RN 902123-64-2 HCAPLUS

CN L-Valine, N-[[2'-[2-[1-[[[2-[[2-(nitrooxy)ethyl]thio]ethoxy]carbonyloxy]ethyl]-2H-tetrazol-5-yl][1,1'-biphenyl]-4-yl]methyl]-N-(1-oxopentyl)- (CA INDEX NAME)

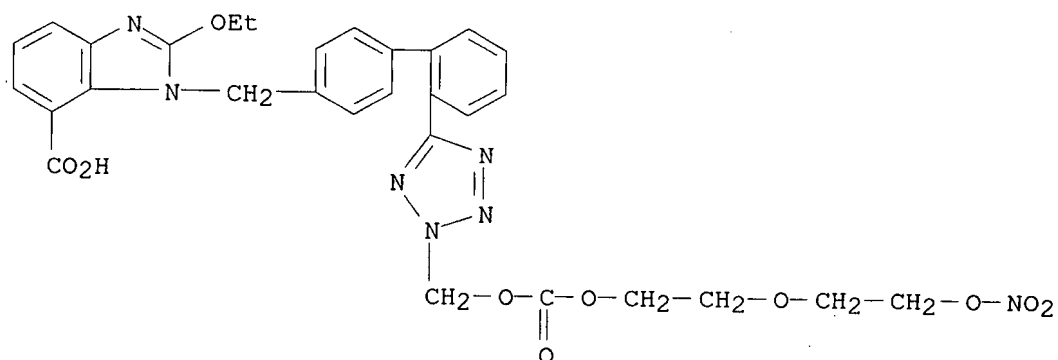
Absolute stereochemistry.



RN 902124-01-0 HCAPLUS

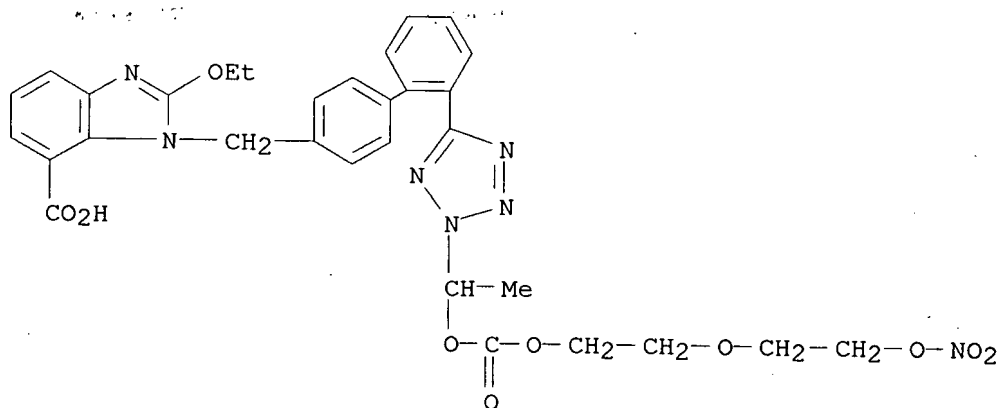
CN 1H-Benzimidazole-7-carboxylic acid, 2-ethoxy-1-[[2'-[2-[[[2-[[2-(nitrooxy)ethoxy]ethoxy]carbonyloxy]methyl]-2H-tetrazol-5-yl][1,1'-biphenyl]-4-yl]methyl]- (CA INDEX NAME)

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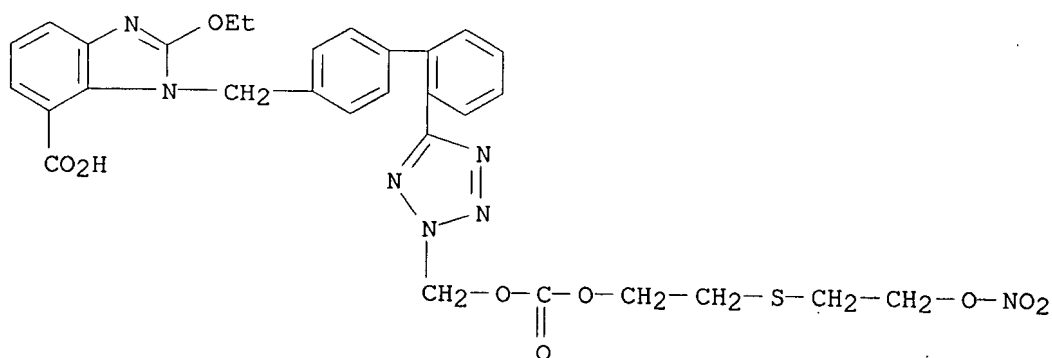
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CN 1H-Benzimidazole-7-carboxylic acid, 2-ethoxy-1-[[2'-[2-[1-[[2-[2-(nitrooxy)ethoxy]ethoxy]carbonyl]oxy]ethyl]-2H-tetrazol-5-yl][1,1'-biphenyl]-4-yl]methyl]- (CA INDEX NAME)



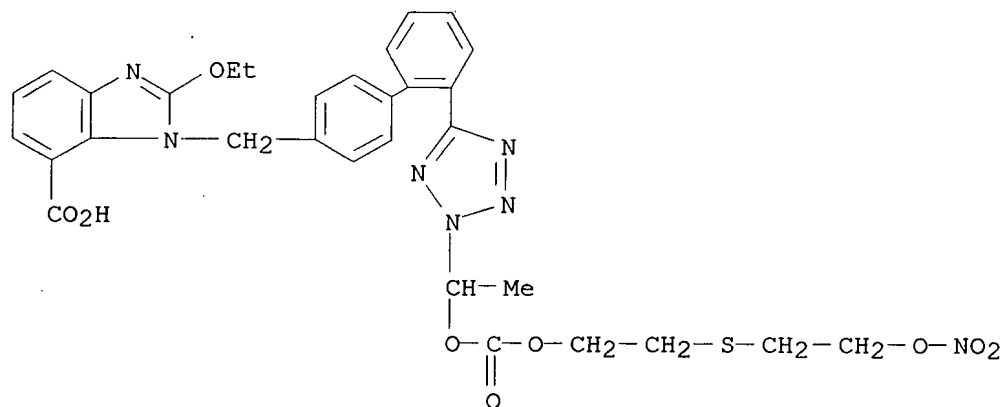
RN 902124-03-2 HCAPLUS

CN 1H-Benzimidazole-7-carboxylic acid, 2-ethoxy-1-[[2'-[2-[1-[[2-[2-(nitrooxy)ethyl]thio]ethoxy]carbonyl]oxy]methyl]-2H-tetrazol-5-yl][1,1'-biphenyl]-4-yl]methyl]- (CA INDEX NAME)



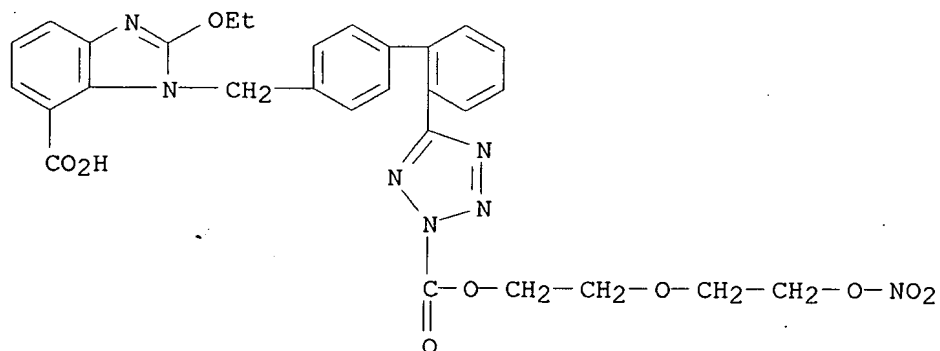
RN 902124-04-3 HCAPLUS

CN 1H-Benzimidazole-7-carboxylic acid, 2-ethoxy-1-[[2'-[2-[1-[[[2-[[2-(nitrooxy)ethyl]thio]ethoxy]carbonyl]oxy]ethyl]-2H-tetrazol-5-yl][1,1'-biphenyl]-4-yl]methyl]- (CA INDEX NAME)



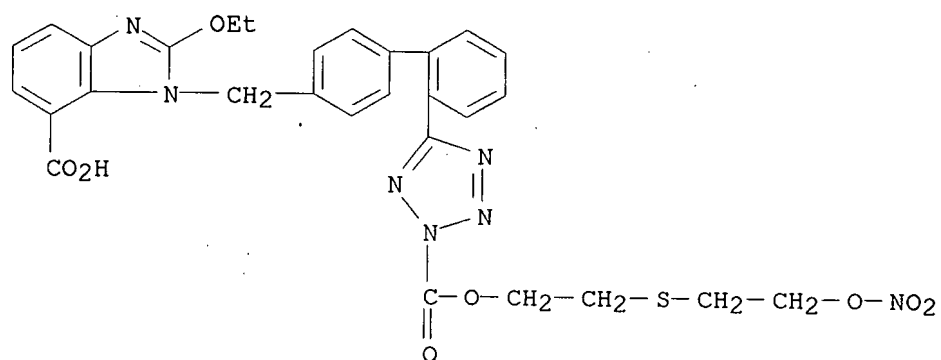
RN 902124-06-5 HCAPLUS

CN 1H-Benzimidazole-7-carboxylic acid, 2-ethoxy-1-[[2'-[2-[2-[2-(nitrooxy)ethoxy]ethoxy]carbonyl]-2H-tetrazol-5-yl][1,1'-biphenyl]-4-yl]methyl]- (CA INDEX NAME)



RN 902124-07-6 HCAPLUS

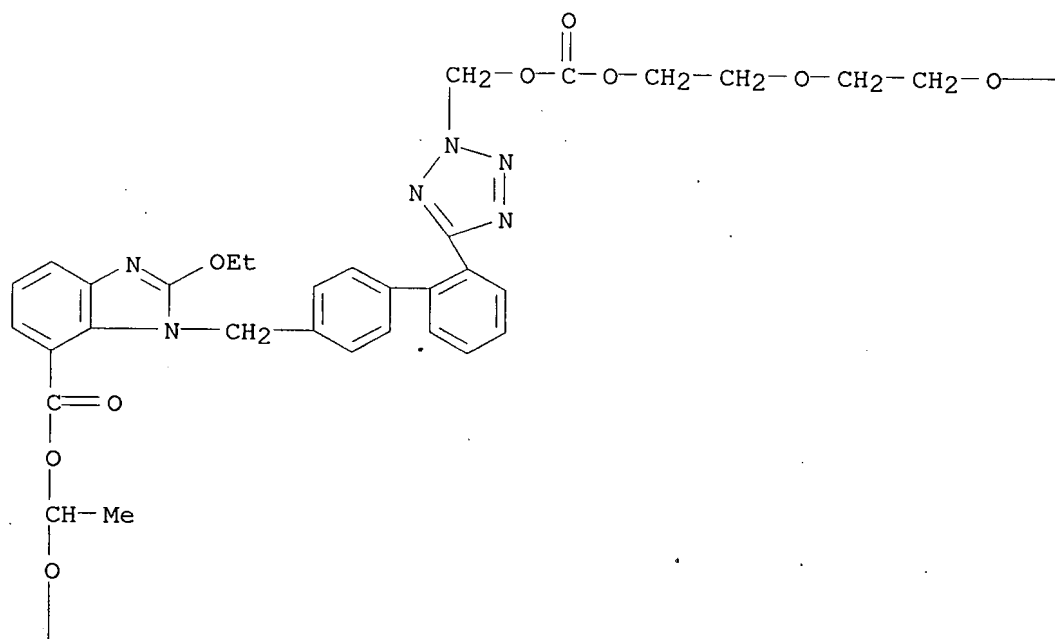
CN 1H-Benzimidazole-7-carboxylic acid, 2-ethoxy-1-[[2'-[2-[2-[2-(nitrooxy)ethyl]thio]ethoxy]carbonyl]-2H-tetrazol-5-yl][1,1'-biphenyl]-4-yl]methyl]- (CA INDEX NAME)



RN 902124-33-8 HCAPLUS

CN 1H-Benzimidazole-7-carboxylic acid, 2-ethoxy-1-[[2'-[2-[[[2-[2-(nitrooxy)ethoxy]ethoxy]carbonyl]oxy]methyl]-2H-tetrazol-5-yl][1,1'-biphenyl]-4-yl]methyl]-, 1-[(cyclohexyloxy)carbonyl]oxy]ethyl ester (CA INDEX NAME)

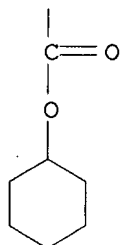
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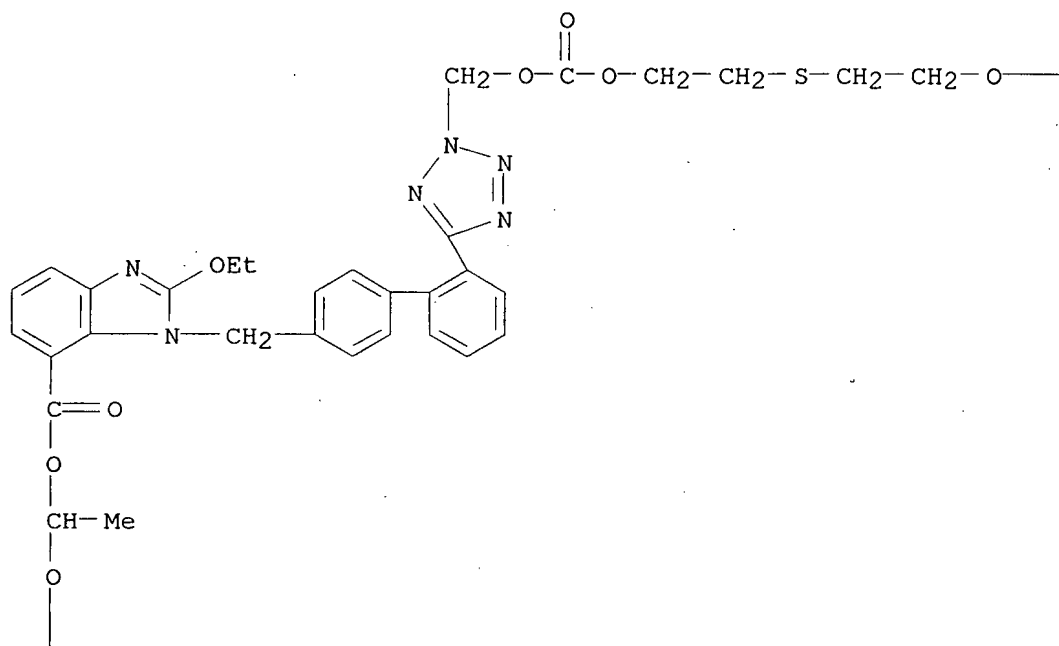
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RN 902124-34-9 HCAPLUS  
 CN 1H-Benzimidazole-7-carboxylic acid, 2-ethoxy-1-[[2'-[2-[[[2-[[2-(nitrooxy)ethyl]thio]ethoxy]carbonyl]oxy]methyl]-2H-tetrazol-5-yl][1,1'-biphenyl]-4-yl]methyl]-, 1-[[[(cyclohexyloxy)carbonyl]oxy]ethyl ester (CA INDEX NAME)

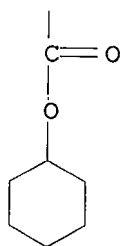
PAGE 1-A



PAGE 1-B

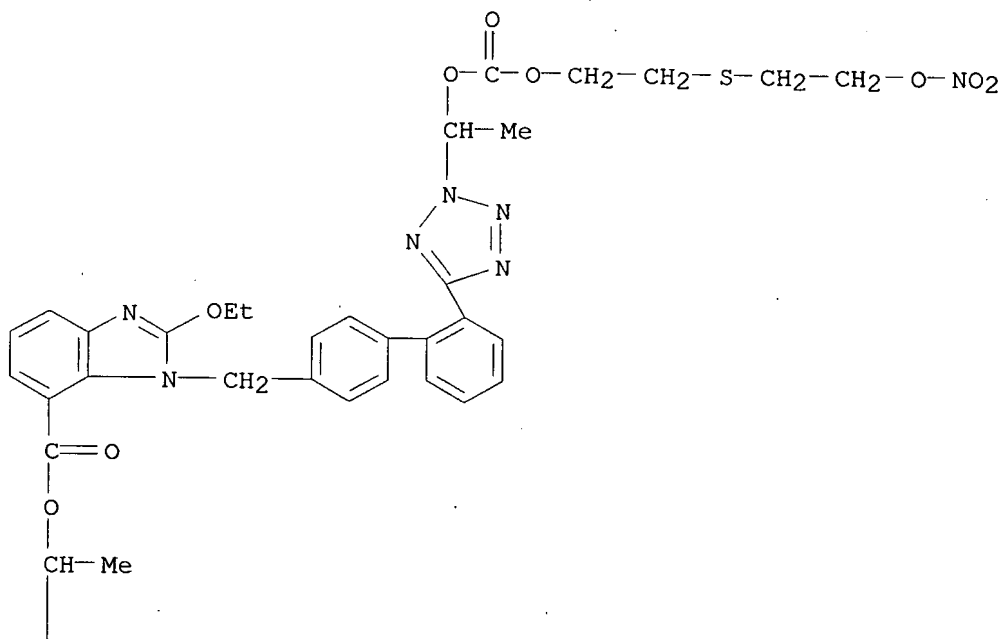
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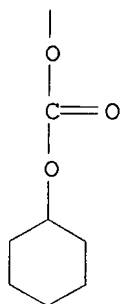


RN 902124-35-0 HCAPLUS  
 CN 1H-Benzimidazole-7-carboxylic acid, 2-ethoxy-1-[[2'-[2-[1-[[[2-[[2-(nitrooxy)ethyl]thio]ethoxy]carbonyl]oxy]ethyl]-2H-tetrazol-5-yl][1,1'-biphenyl]-4-yl]methyl]-, 1-[[[(cyclohexyloxy)carbonyl]oxy]ethyl ester (CA INDEX NAME)

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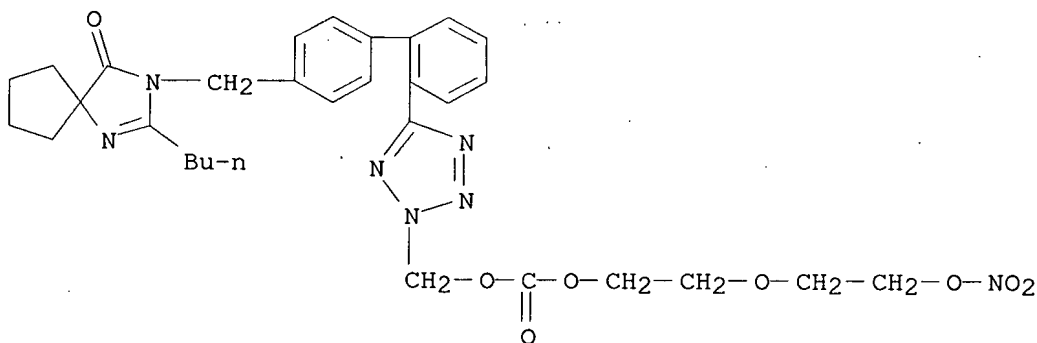






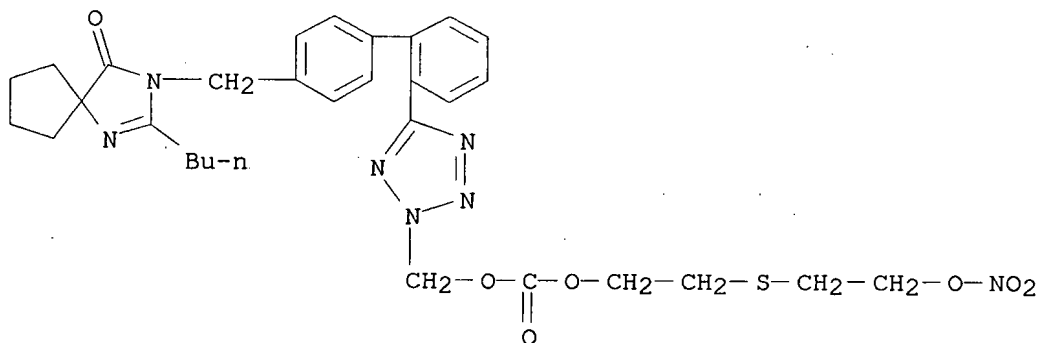
RN 902124-55-4 HCAPLUS

CN Carbonic acid, [5-[4'-[(2-butyl-4-oxo-1,3-diazaspiro[4.4]non-1-en-3-yl)methyl][1,1'-biphenyl]-2-yl]-2H-tetrazol-2-yl)methyl  
2-[2-(nitrooxy)ethoxy]ethyl ester (9CI) (CA INDEX NAME)



RN 902124-56-5 HCAPLUS

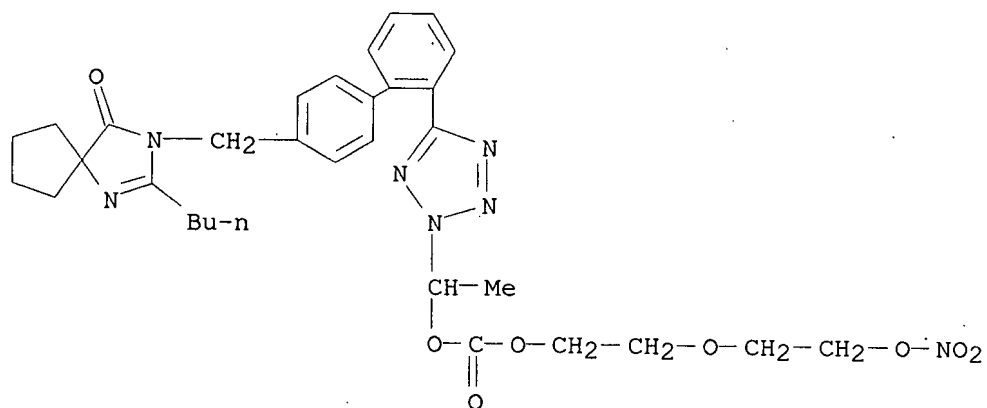
CN Carbonic acid, [5-[4'-[(2-butyl-4-oxo-1,3-diazaspiro[4.4]non-1-en-3-yl)methyl][1,1'-biphenyl]-2-yl]-2H-tetrazol-2-yl)methyl  
2-[[2-(nitrooxy)ethyl]thio]ethyl ester (9CI) (CA INDEX NAME)



RN 902124-57-6 HCAPLUS

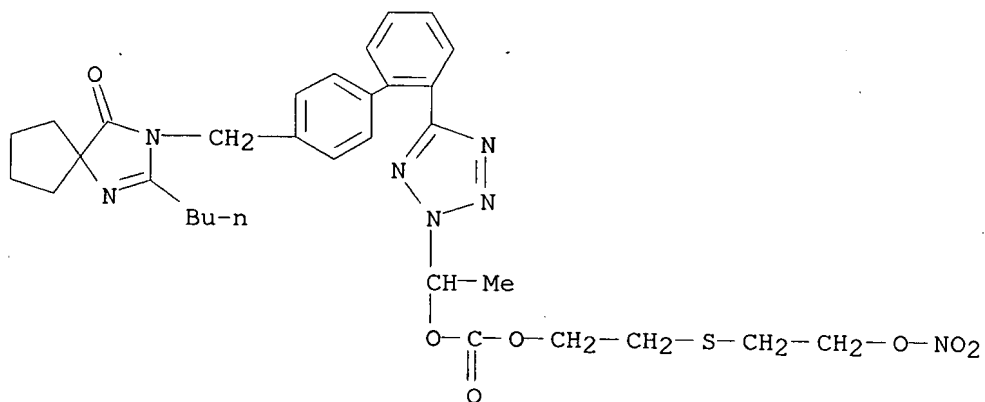
CN Carbonic acid, 1-[5-[4'-[(2-butyl-4-oxo-1,3-diazaspiro[4.4]non-1-en-3-yl)methyl][1,1'-biphenyl]-2-yl]-2H-tetrazol-2-yl]ethyl

2-[2-(nitrooxy)ethoxy]ethyl ester (9CI) (CA INDEX NAME)



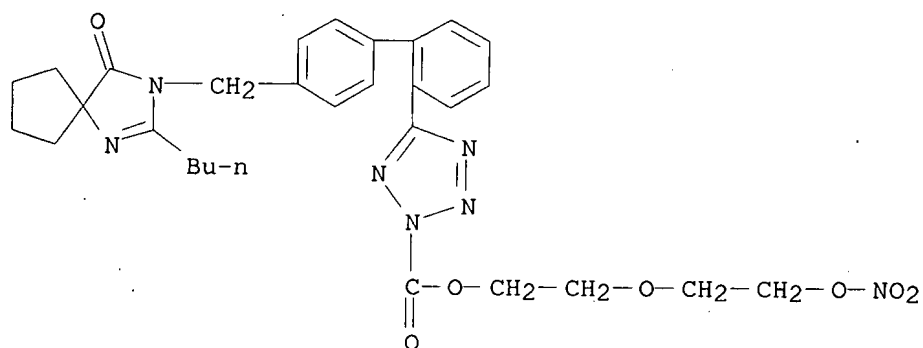
RN 902124-58-7 HCAPLUS

CN Carbonic acid, 1-[5-[4'-[(2-butyl-4-oxo-1,3-diazaspiro[4.4]non-1-en-3-yl)methyl][1,1'-biphenyl]-2-yl]-2H-tetrazol-2-yl]ethyl 2-[2-(nitrooxy)ethyl]thio]ethyl ester (9CI) (CA INDEX NAME)



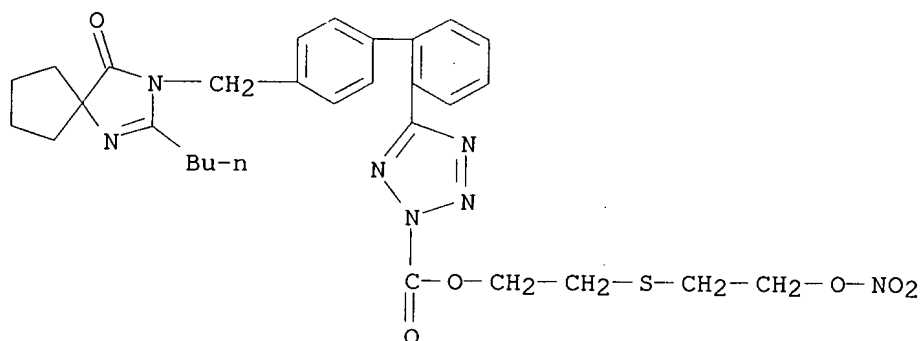
RN 902124-74-7 HCAPLUS

CN 2H-Tetrazole-2-carboxylic acid, 5-[4'-[(2-butyl-4-oxo-1,3-diazaspiro[4.4]non-1-en-3-yl)methyl][1,1'-biphenyl]-2-yl]-, 2-[2-(nitrooxy)ethoxy]ethyl ester (CA INDEX NAME)



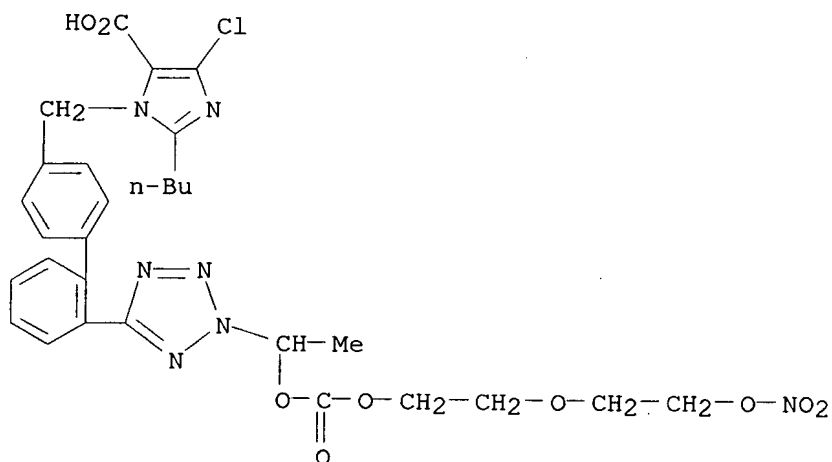
RN 902124-75-8 HCAPLUS

CN 2H-Tetrazole-2-carboxylic acid, 5-[4'-[(2-butyl-4-oxo-1,3-diazaspiro[4.4]non-1-en-3-yl)methyl][1,1'-biphenyl]-2-yl]-, 2-[[2-(nitrooxy)ethyl]thio]ethyl ester (CA INDEX NAME)



RN 902125-06-8 HCAPLUS

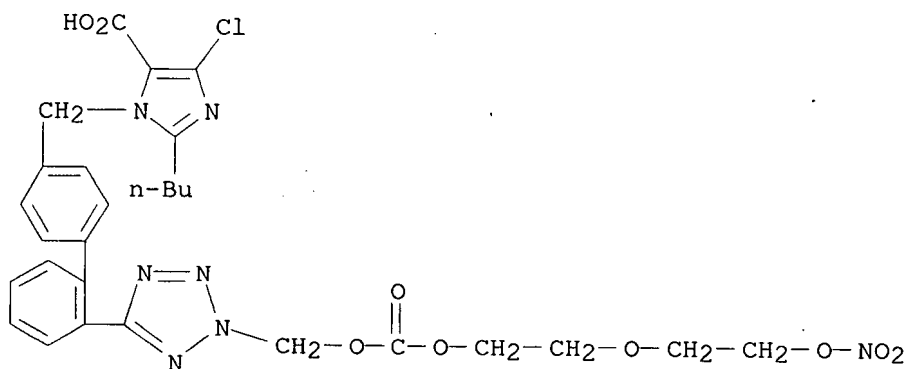
CN 1H-Imidazole-5-carboxylic acid, 2-butyl-4-chloro-1-[[2'-[2-[1-[[[2-[2-(nitrooxy)ethoxy]ethoxy]carbonyl]oxy]ethyl]-2H-tetrazol-5-yl][1,1'-biphenyl]-4-yl]methyl]- (CA INDEX NAME)



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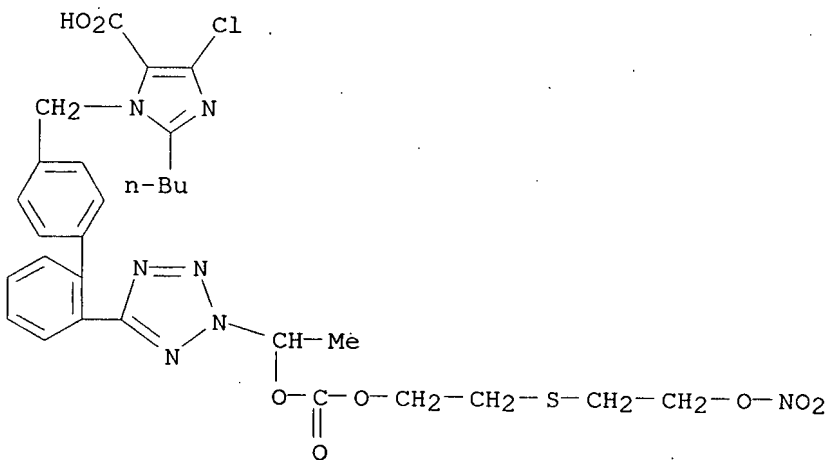
RN 902125-07-9 HCAPLUS

CN 1H-Imidazole-5-carboxylic acid, 2-butyl-4-chloro-1-[[2'-[2-[[[2-[2-(nitrooxy)ethoxy]ethoxy]carbonyl]oxy]methyl]-2H-tetrazol-5-yl][1,1'-biphenyl]-4-yl]methyl]- (CA INDEX NAME)



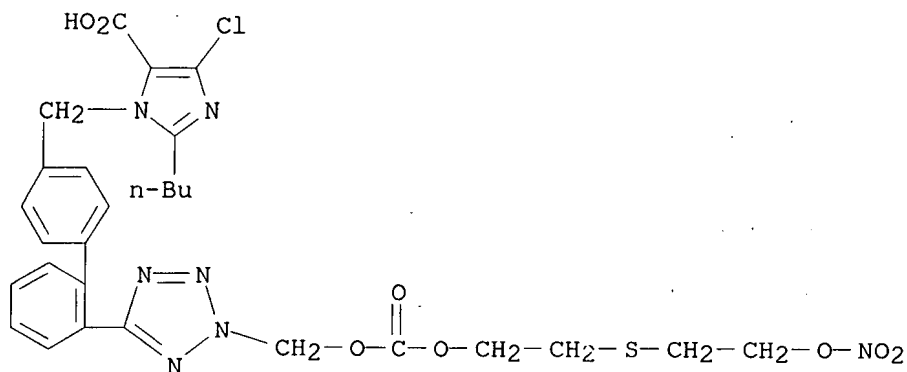
RN 902125-08-0 HCAPLUS

CN 1H-Imidazole-5-carboxylic acid, 2-butyl-4-chloro-1-[[2'-[2-[1-[[[2-[[2-(nitrooxy)ethyl]thio]ethoxy]carbonyl]oxy]ethyl]-2H-tetrazol-5-yl][1,1'-biphenyl]-4-yl]methyl]- (CA INDEX NAME)



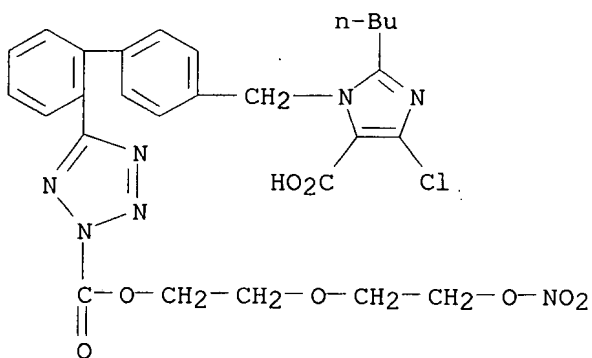
RN 902125-09-1 HCAPLUS

CN 1H-Imidazole-5-carboxylic acid, 2-butyl-4-chloro-1-[[2'-[2-[[[2-[[2-(nitrooxy)ethyl]thio]ethoxy]carbonyl]oxy]methyl]-2H-tetrazol-5-yl][1,1'-biphenyl]-4-yl]methyl]- (CA INDEX NAME)



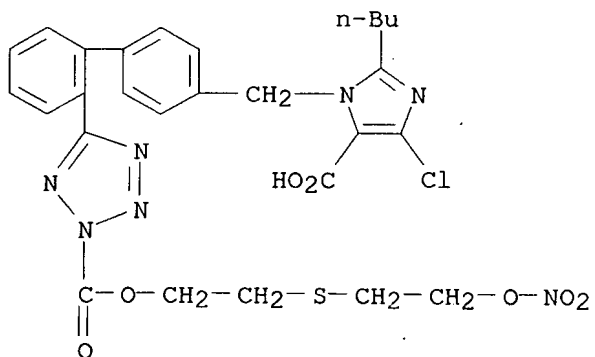
RN 902125-11-5 HCAPLUS

CN 2H-Tetrazole-2-carboxylic acid, 5-[4'-[(2-butyl-5-carboxy-4-chloro-1H-imidazol-1-yl)methyl][1,1'-biphenyl]-2-yl]-, 2-[2-(nitrooxy)ethoxy]ethyl ester (CA INDEX NAME)



RN 902125-12-6 HCAPLUS

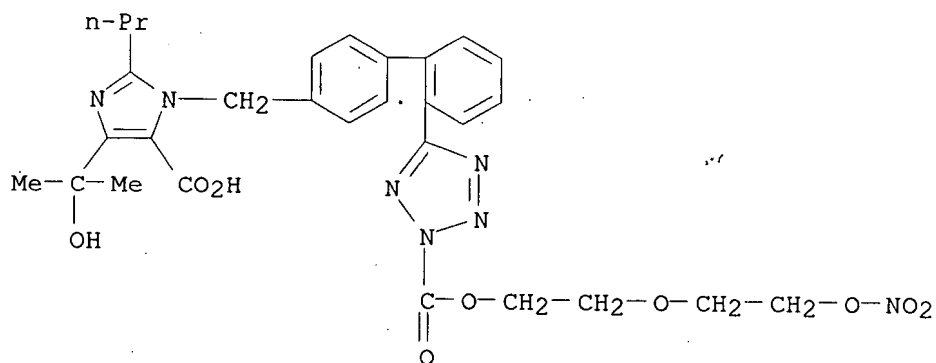
CN 2H-Tetrazole-2-carboxylic acid, 5-[4'-[(2-butyl-5-carboxy-4-chloro-1H-imidazol-1-yl)methyl][1,1'-biphenyl]-2-yl]-, 2-[2-[[2-(nitrooxy)ethyl]thio]ethyl] ester (CA INDEX NAME)



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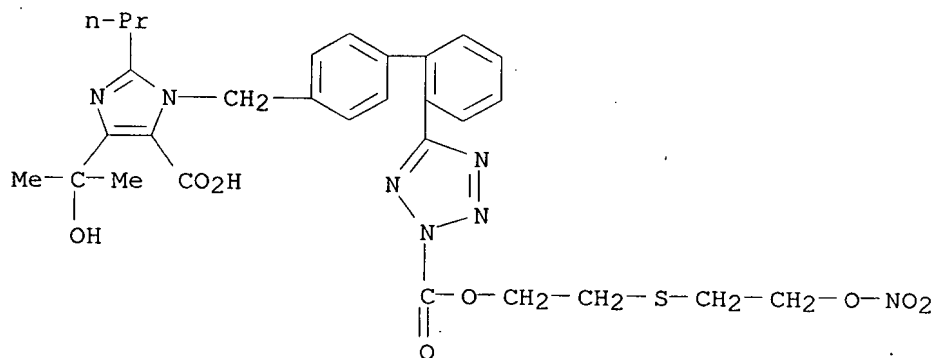
RN 902125-30-8 HCAPLUS

CN 2H-Tetrazole-2-carboxylic acid, 5-[4'-[[5-carboxy-4-(1-hydroxy-1-methylethyl)-2-propyl-1H-imidazol-1-yl]methyl][1,1'-biphenyl]-2-yl]-, 2-[2-[2-(nitrooxy)ethoxy]ethyl] ester (CA INDEX NAME)



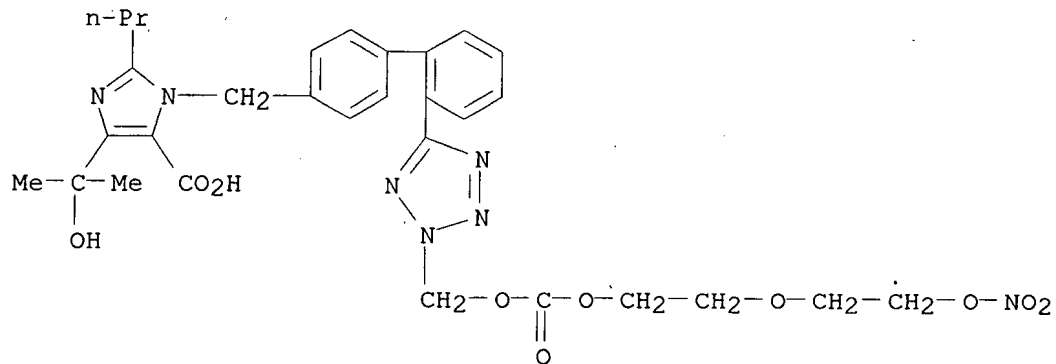
RN 902125-31-9 HCAPLUS

CN 2H-Tetrazole-2-carboxylic acid, 5-[4'-[[5-carboxy-4-(1-hydroxy-1-methylethyl)-2-propyl-1H-imidazol-1-yl]methyl][1,1'-biphenyl]-2-yl]-, 2-[2-[[2-(nitrooxy)ethyl]thio]ethyl] ester (CA INDEX NAME)



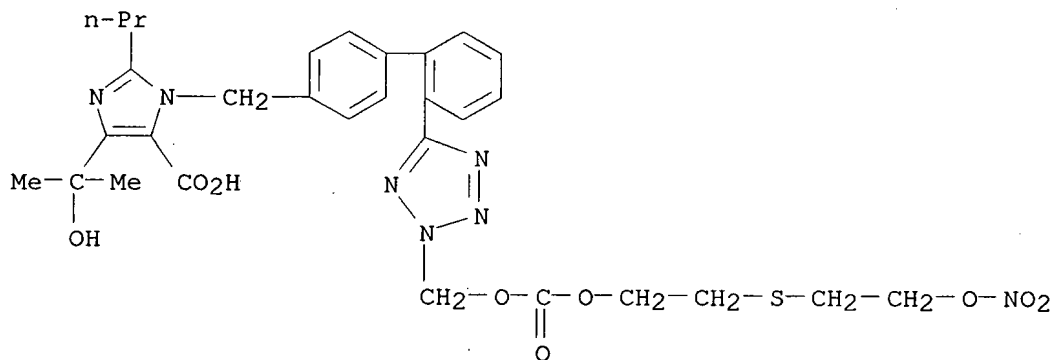
RN 902125-41-1 HCAPLUS

CN 1H-Imidazole-5-carboxylic acid, 4-(1-hydroxy-1-methylethyl)-1-[[2'-[2-[[[2-[2-(nitrooxy)ethoxy]ethoxy]carbonyl]oxy]methyl]-2H-tetrazol-5-yl][1,1'-biphenyl]-4-yl]methyl]-2-propyl- (CA INDEX NAME)



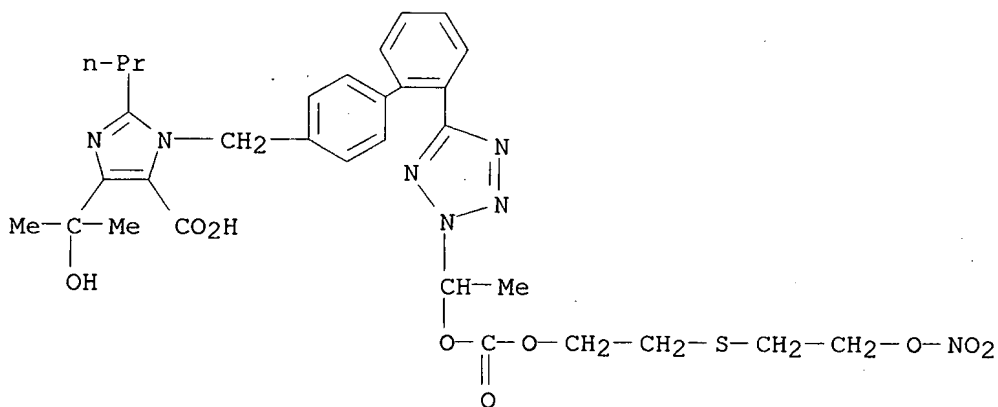
RN 902125-42-2 HCAPLUS

CN 1H-Imidazole-5-carboxylic acid, 4-(1-hydroxy-1-methylethyl)-1-[[2'-[2-[[[2-[2-(nitrooxy)ethyl]thio]ethoxy]carbonyl]oxy]methyl]-2H-tetrazol-5-yl][1,1'-biphenyl]-4-yl]methyl]-2-propyl- (CA INDEX NAME)



RN 902125-51-3 HCAPLUS

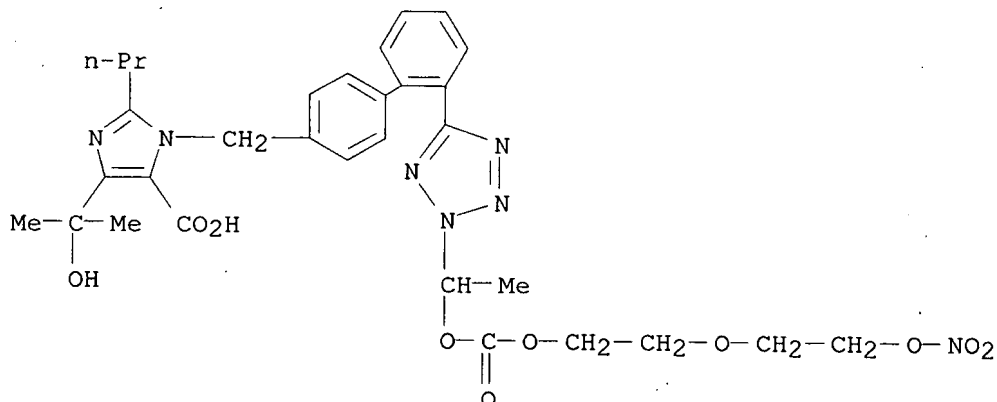
CN 1H-Imidazole-5-carboxylic acid, 4-(1-hydroxy-1-methylethyl)-1-[[2'-[2-[1-[[[2-[2-(nitrooxy)ethyl]thio]ethoxy]carbonyl]oxy]ethyl]-2H-tetrazol-5-yl][1,1'-biphenyl]-4-yl]methyl]-2-propyl- (CA INDEX NAME)



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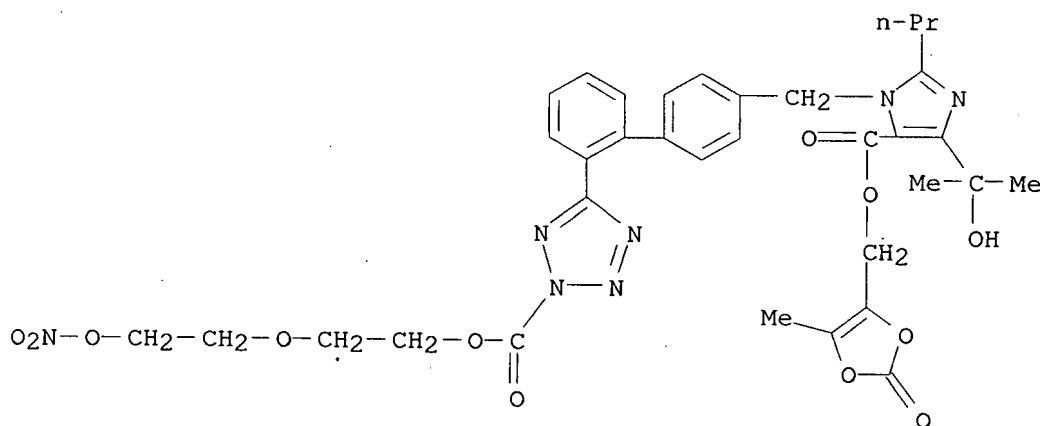
RN 902125-54-6 HCAPLUS

CN 1H-Imidazole-5-carboxylic acid, 4-(1-hydroxy-1-methylethyl)-1-[[2'-[2-[1-[[[2-[2-(nitrooxy)ethoxy]ethoxy]carbonyl]oxy]ethyl]-2H-tetrazol-5-yl][1,1'-biphenyl]-4-yl]methyl]-2-propyl- (CA INDEX NAME)



RN 902125-71-7 HCAPLUS

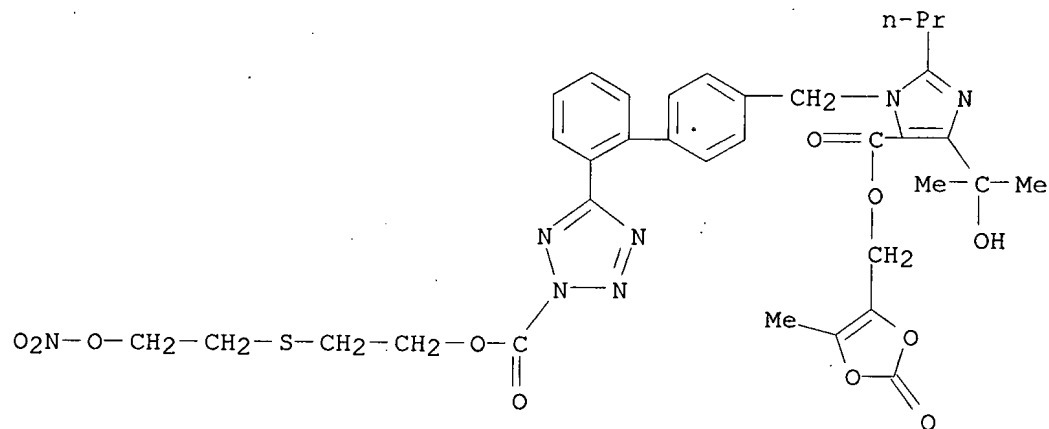
CN 2H-Tetrazole-2-carboxylic acid, 5-[4'-[[4-(1-hydroxy-1-methylethyl)-5-[[[(5-methyl-2-oxo-1,3-dioxol-4-yl)methoxy]carbonyl]-2-propyl-1H-imidazol-1-yl]methyl][1,1'-biphenyl]-2-yl]-, 2-[2-(nitrooxy)ethoxy]ethyl ester (CA INDEX NAME)



RN 902125-72-8 HCAPLUS

CN 2H-Tetrazole-2-carboxylic acid, 5-[4'-[[4-(1-hydroxy-1-methylethyl)-5-[[[(5-methyl-2-oxo-1,3-dioxol-4-yl)methoxy]carbonyl]-2-propyl-1H-imidazol-1-yl]methyl][1,1'-biphenyl]-2-yl]-, 2-[2-(nitrooxy)ethyl]thio]ethyl ester (CA INDEX NAME)

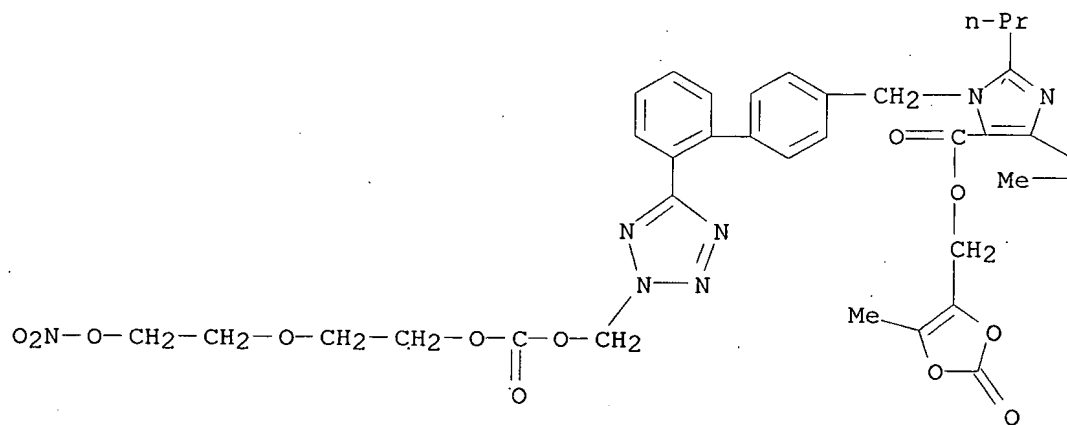




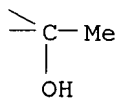
RN 902125-78-4 HCAPLUS

CN 1H-Imidazole-5-carboxylic acid, 4-(1-hydroxy-1-methylethyl)-1-[[2'-[2-[[[2-[2-(nitrooxy)ethoxy]ethoxy]carbonyl]oxy]methyl]-2H-tetrazol-5-yl][1,1'-biphenyl]-4-yl)methyl]-2-propyl-, (5-methyl-2-oxo-1,3-dioxol-4-yl)methyl ester (CA INDEX NAME)

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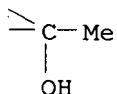
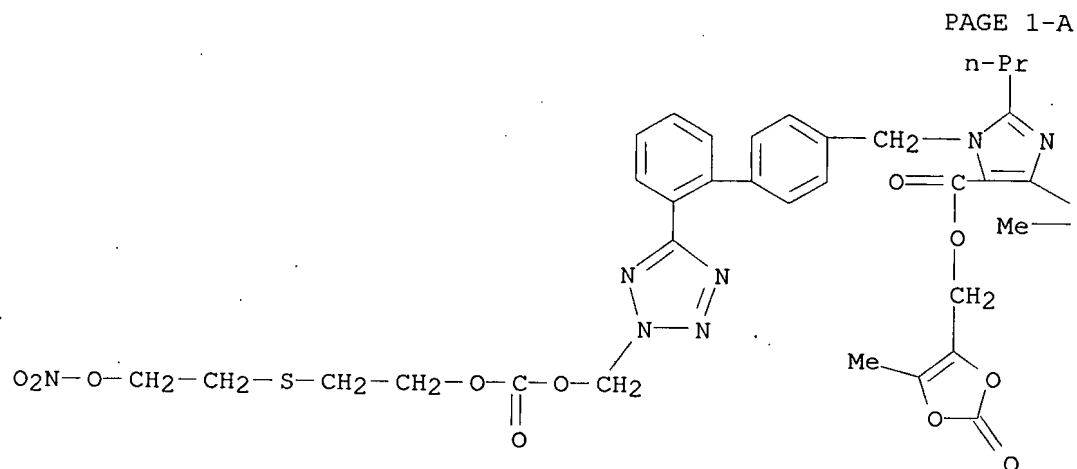
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RN 902125-79-5 HCAPLUS

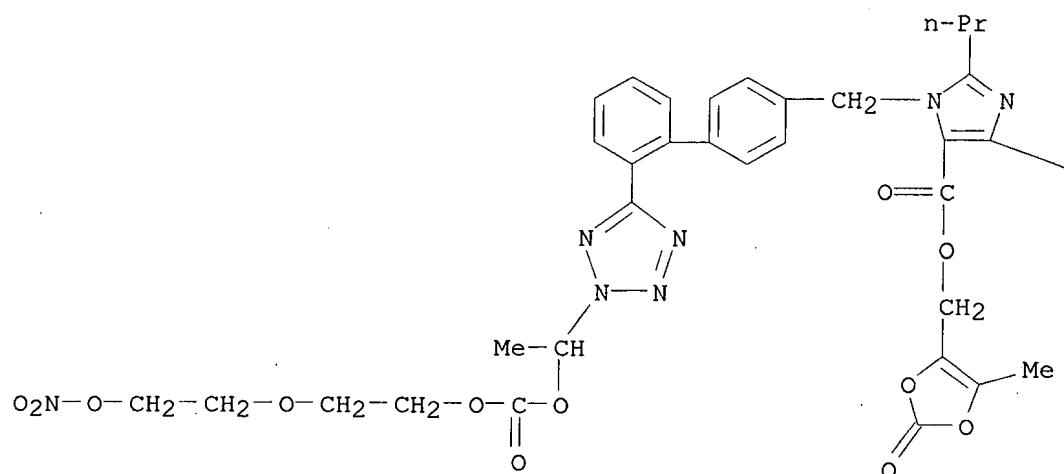
CN 1H-Imidazole-5-carboxylic acid, 4-(1-hydroxy-1-methylethyl)-1-[[2'-[2-[[[2-[2-(nitrooxy)ethyl]thio]ethoxy]carbonyl]oxy]methyl]-2H-tetrazol-5-yl][1,1'-biphenyl]-4-yl]methyl]-2-propyl-, (5-methyl-2-oxo-1,3-dioxol-4-yl)methyl ester (CA INDEX NAME)



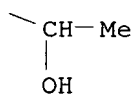
RN 902125-89-7 HCAPLUS

CN 1H-Imidazole-5-carboxylic acid, 4-(1-hydroxyethyl)-1-[[2'-[2-[1-[[[2-[2-(nitrooxy)ethoxy]ethoxy]carbonyl]oxy]ethyl]-2H-tetrazol-5-yl][1,1'-biphenyl]-4-yl]methyl]-2-propyl-, (5-methyl-2-oxo-1,3-dioxol-4-yl)methyl ester (CA INDEX NAME)

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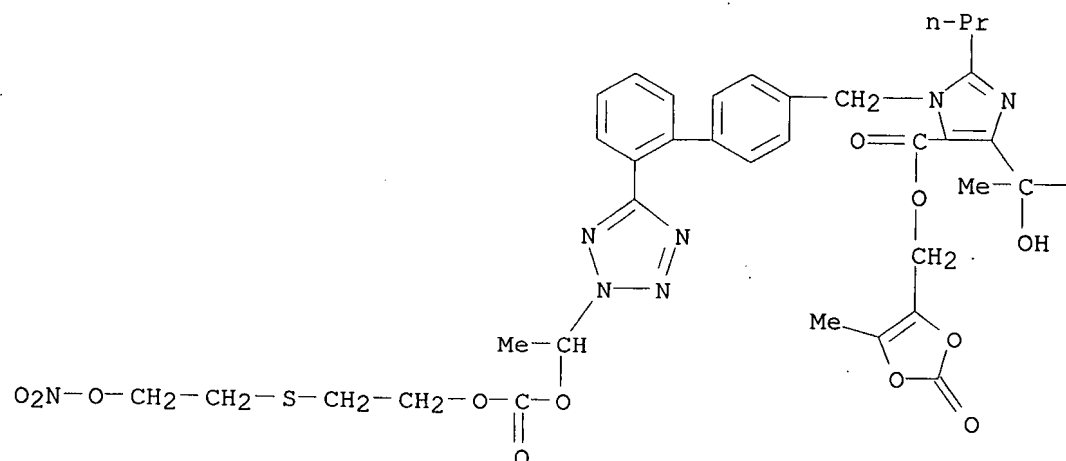
PAGE 1-B



RN 902125-90-0 HCAPLUS

CN 1H-Imidazole-5-carboxylic acid, 4-(1-hydroxy-1-methylethyl)-1-[[2'-[2-[1-[[[2-[[2-(nitrooxy)ethyl]thio]ethoxy]carbonyl]oxy]ethyl]-2H-tetrazol-5-yl][1,1'-biphenyl]-4-yl]methyl]-2-propyl-, (5-methyl-2-oxo-1,3-dioxol-4-yl)methyl ester (CA INDEX NAME)

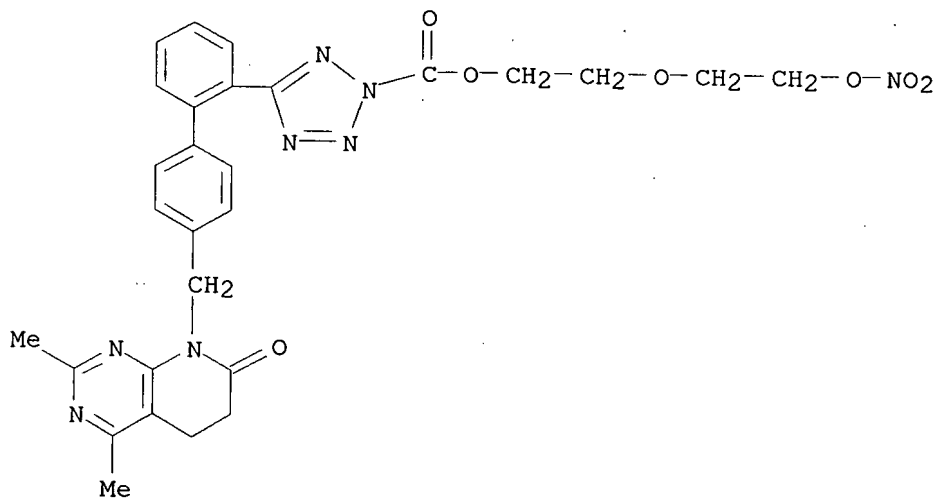
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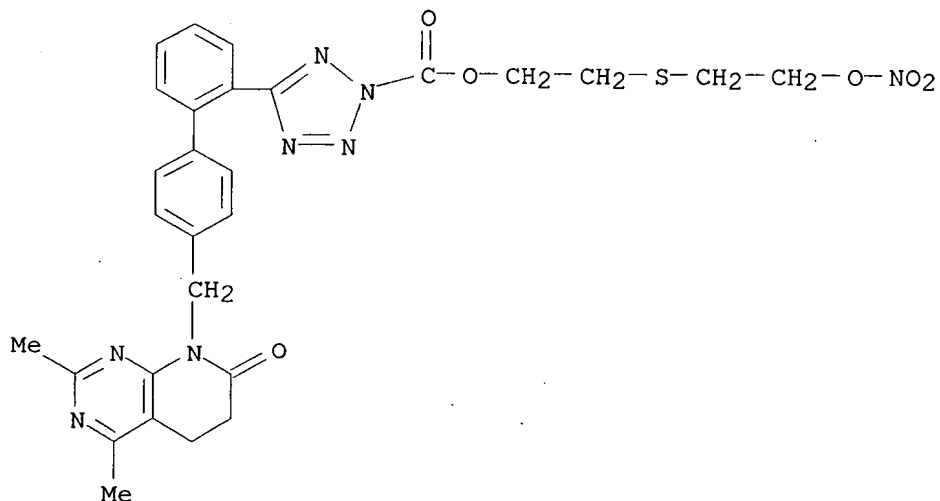
— Me

RN 902126-04-9 HCAPLUS  
 CN 2H-Tetrazole-2-carboxylic acid, 5-[4'-[(6,7-dihydro-2,4-dimethyl-7-oxopyrido[2,3-d]pyrimidin-8(5H)-yl)methyl][1,1'-biphenyl]-2-yl]-, 2-[2-(nitrooxy)ethoxy]ethyl ester (CA INDEX NAME)



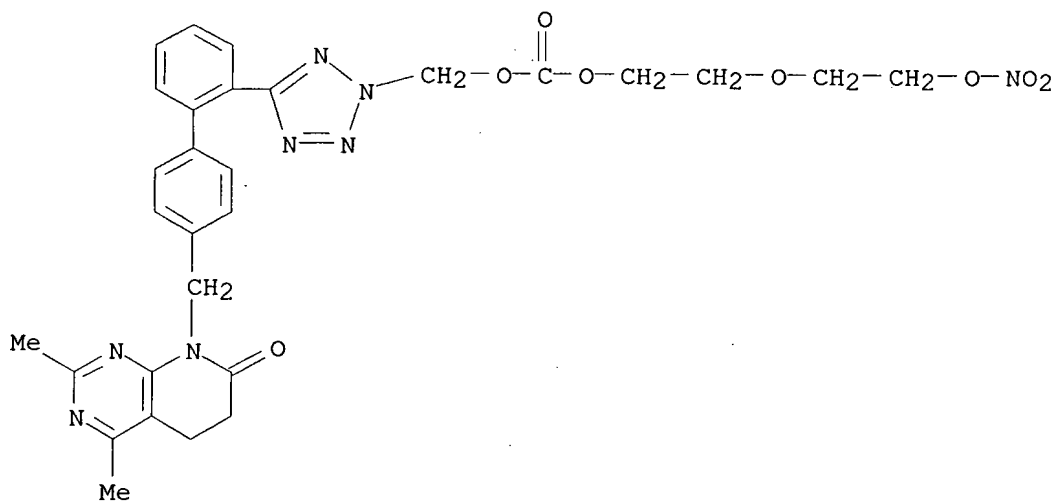
RN 902126-05-0 HCAPLUS

CN 2H-Tetrazole-2-carboxylic acid, 5-[4'-[(6,7-dihydro-2,4-dimethyl-7-oxopyrido[2,3-d]pyrimidin-8(5H)-yl)methyl][1,1'-biphenyl]-2-yl]-, 2-[[2-(nitrooxy)ethyl]thio]ethyl ester (CA INDEX NAME)



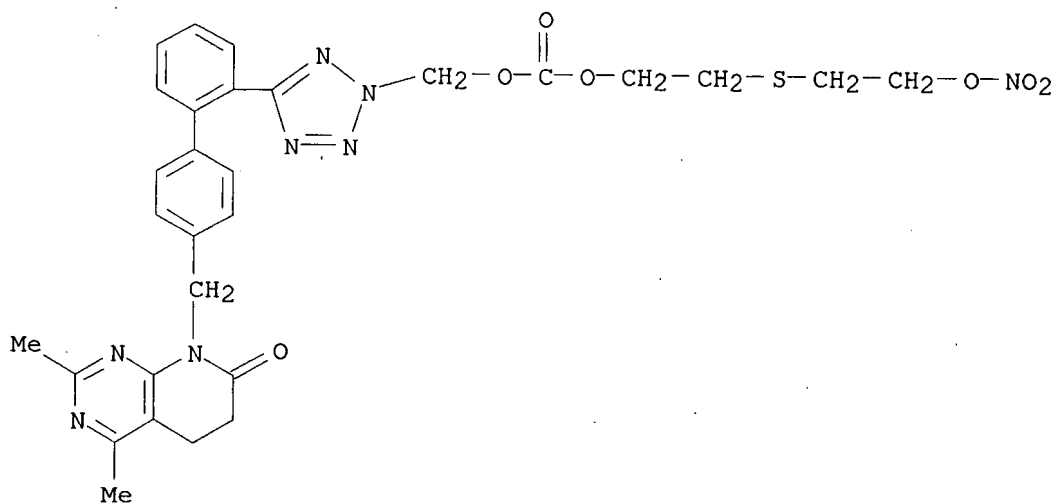
RN 902126-15-2 HCAPLUS

CN Carbonic acid, [5-[4'-[(6,7-dihydro-2,4-dimethyl-7-oxopyrido[2,3-d]pyrimidin-8(5H)-yl)methyl][1,1'-biphenyl]-2-yl]-2H-tetrazol-2-yl]methyl 2-[2-(nitrooxy)ethoxy]ethyl ester (9CI) (CA INDEX NAME)



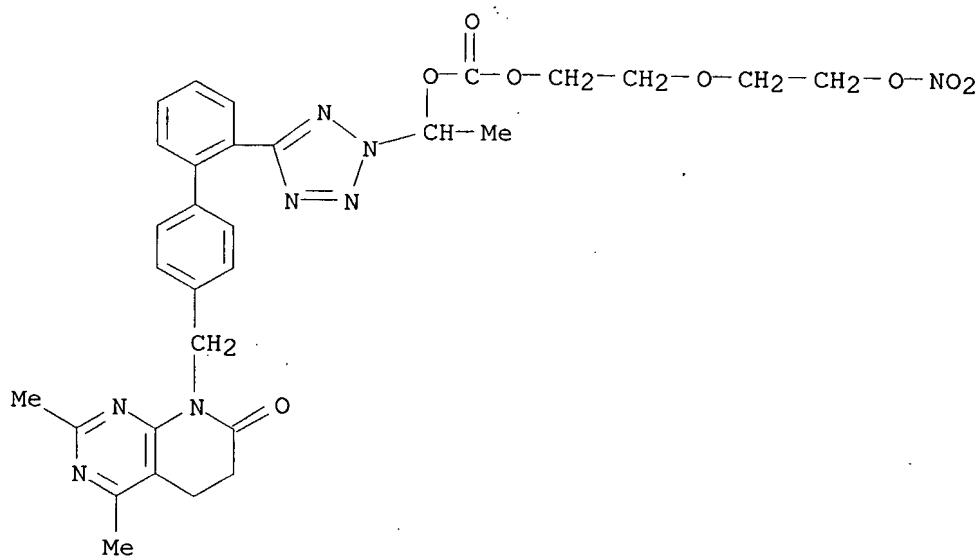
RN 902126-16-3 HCAPLUS

CN Carbonic acid, [5-[4'-[(6,7-dihydro-2,4-dimethyl-7-oxopyrido[2,3-d]pyrimidin-8(5H)-yl)methyl][1,1'-biphenyl]-2-yl]-2H-tetrazol-2-yl]methyl 2-[[2-(nitrooxy)ethyl]thio]ethyl ester (9CI) (CA INDEX NAME)



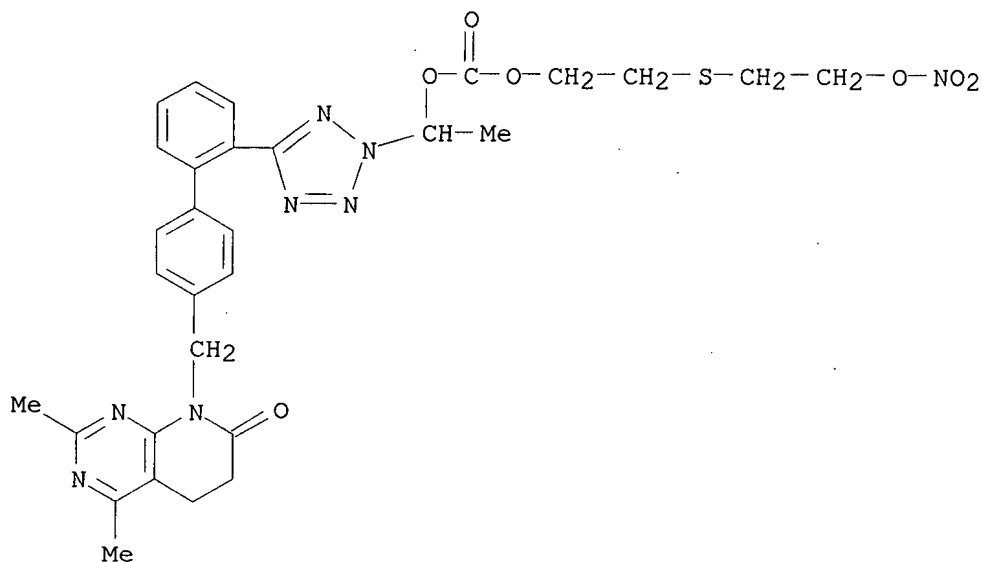
RN 902126-26-5 HCAPLUS

CN Carbonic acid, 1-[5-[4'-[(6,7-dihydro-2,4-dimethyl-7-oxopyrido[2,3-d]pyrimidin-8(5H)-yl)methyl][1,1'-biphenyl]-2-yl]-2H-tetrazol-2-yl]ethyl 2-[2-(nitrooxy)ethoxy]ethyl ester (9CI) (CA INDEX NAME)



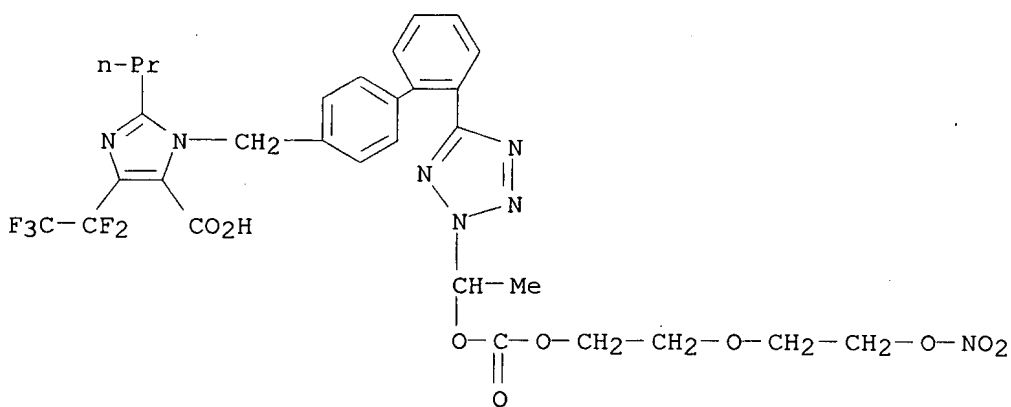
RN 902126-27-6 HCAPLUS

CN Carbonic acid, 1-[5-[4'-[(6,7-dihydro-2,4-dimethyl-7-oxopyrido[2,3-d]pyrimidin-8(5H)-yl)methyl][1,1'-biphenyl]-2-yl]-2H-tetrazol-2-yl]ethyl 2-[[2-(nitrooxy)ethyl]thio]ethyl ester (9CI) (CA INDEX NAME)



RN 902126-64-1 HCAPLUS

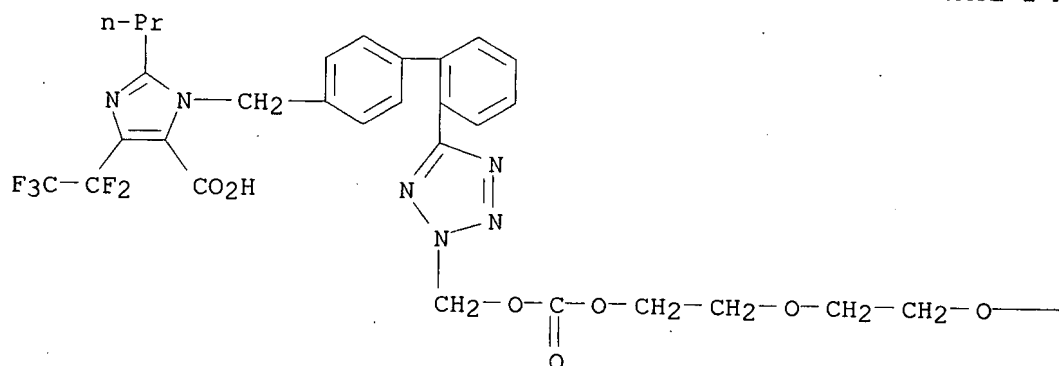
CN 1H-Imidazole-5-carboxylic acid, 1-[[2'-[2-[1-[[2-[2-(nitrooxy)ethoxy]ethoxy]carbonyl]oxy]ethyl]-2H-tetrazol-5-yl][1,1'-biphenyl]-4-yl]methyl]-4-(pentafluoroethyl)-2-propyl- (9CI) (CA INDEX NAME)



RN 902126-65-2 HCAPLUS

CN 1H-Imidazole-5-carboxylic acid, 1-[[2'-[2-[[[[2-[2-(nitrooxy)ethoxy]ethoxy]carbonyl]oxy]methyl]-2H-tetrazol-5-yl][1,1'-biphenyl]-4-yl]methyl]-4-(pentafluoroethyl)-2-propyl- (9CI) (CA INDEX NAME)

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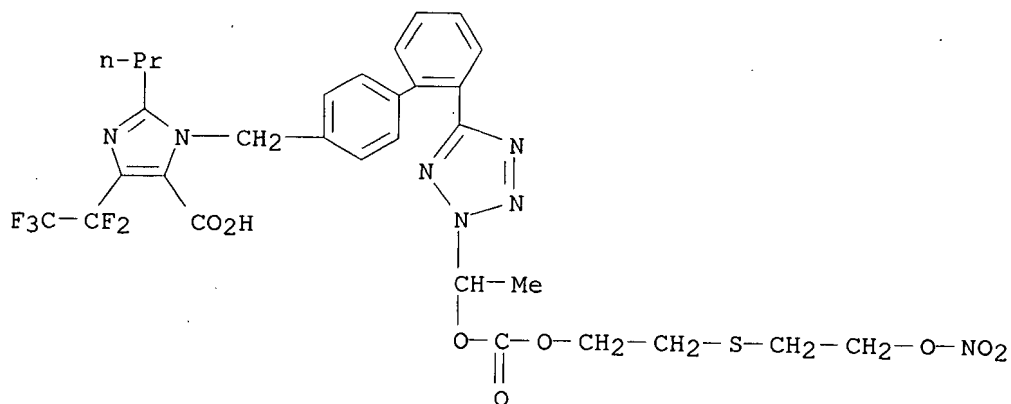


PAGE 1-B

— NO<sub>2</sub>

RN 902126-66-3 HCAPLUS

CN 1H-Imidazole-5-carboxylic acid, 1-[[2'-[2-[1-[[[2-[[2-(nitrooxy)ethyl]thio]ethoxy]carbonyl]oxy]ethyl]-2H-tetrazol-5-yl][1,1'-biphenyl]-4-yl]methyl]-4-(pentafluoroethyl)-2-propyl- (9CI) (CA INDEX NAME)

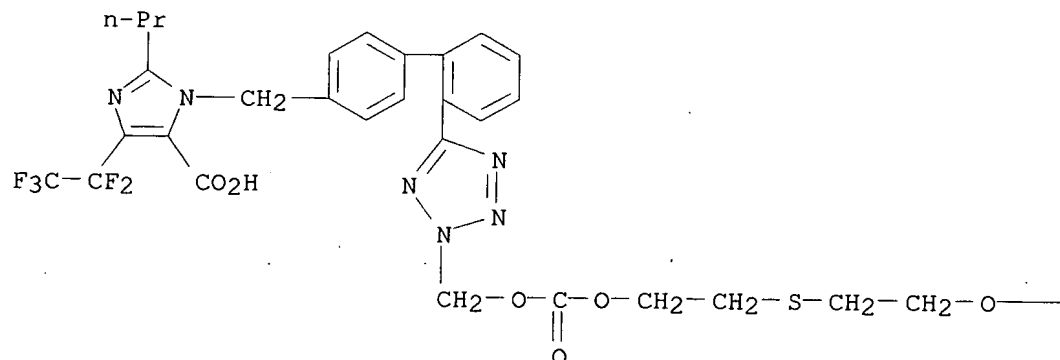


RN 902126-67-4 HCAPLUS



CN 1H-Imidazole-5-carboxylic acid, 1-[[2'-[2-[[[2-[2-(nitrooxy)ethyl]thio]ethoxy]carbonyl]oxy]methyl]-2H-tetrazol-5-yl][1,1'-biphenyl]-4-yl]methyl]-4-(pentafluoroethyl)-2-propyl- (9CI) (CA INDEX NAME)

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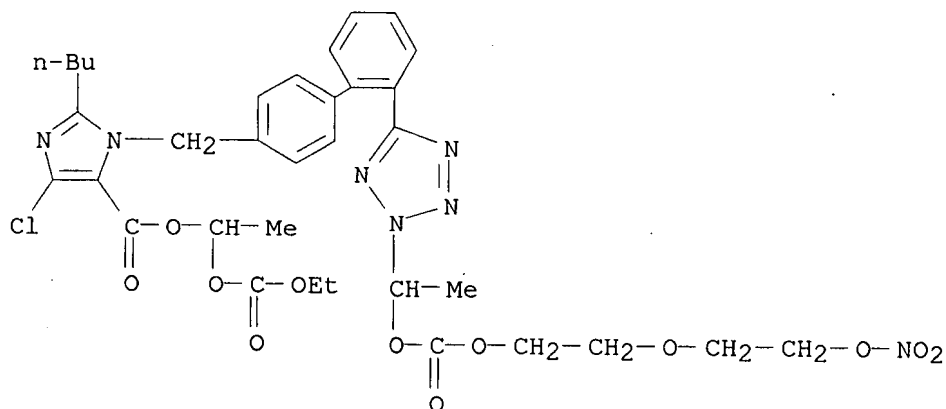


PAGE 1-B

—NO<sub>2</sub>

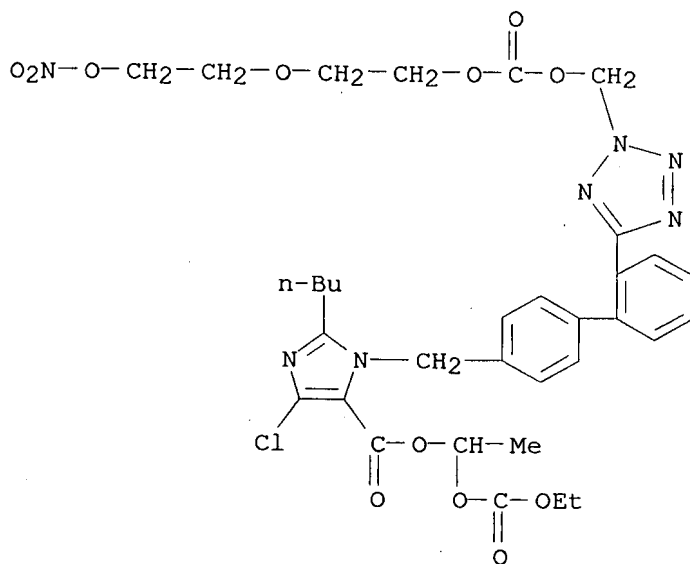
RN 902126-92-5 HCAPLUS

CN 1H-Imidazole-5-carboxylic acid, 2-butyl-4-chloro-1-[[2'-[2-[1-[[[2-[2-(nitrooxy)ethoxy]ethoxy]carbonyl]oxy]ethyl]-2H-tetrazol-5-yl][1,1'-biphenyl]-4-yl]methyl]-, 1-[(ethoxycarbonyl)oxy]ethyl ester (CA INDEX NAME)



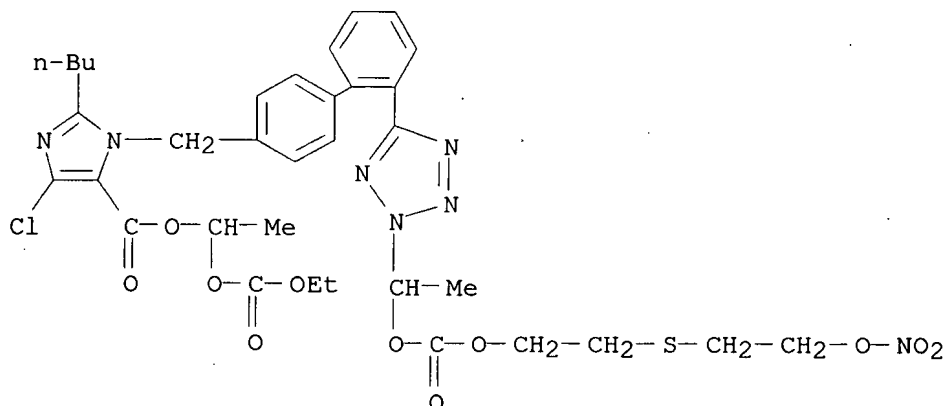
RN 902126-93-6 HCAPLUS

CN 1H-Imidazole-5-carboxylic acid, 2-butyl-4-chloro-1-[[2'-[2-[[[2-[2-(nitrooxy)ethoxy]ethoxy]carbonyl]oxy]methyl]-2H-tetrazol-5-yl][1,1'-biphenyl]-4-yl]methyl]-, 1-[(ethoxycarbonyl)oxy]ethyl ester (CA INDEX NAME)



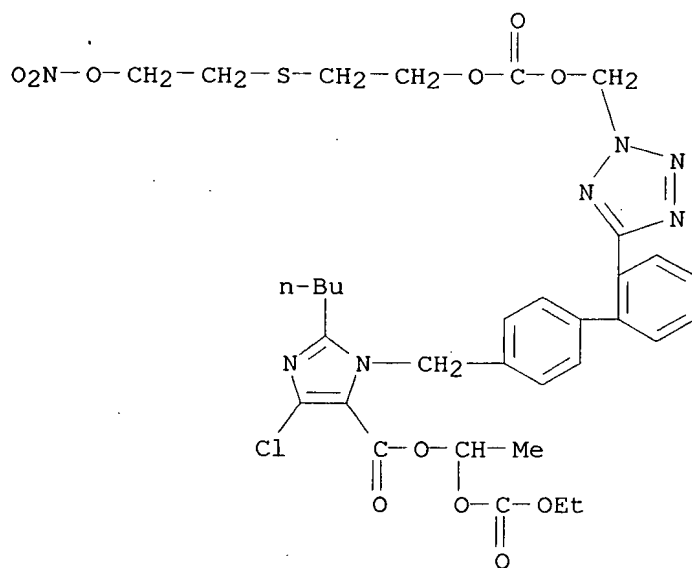
RN 902126-94-7 HCAPLUS

CN 1H-Imidazole-5-carboxylic acid, 2-butyl-4-chloro-1-[[2'-[2-[1-[[[2-[[2-(nitrooxy)ethyl]thio]ethoxy]carbonyl]oxy]ethyl]-2H-tetrazol-5-yl][1,1'-biphenyl]-4-yl]methyl]-, 1-[(ethoxycarbonyl)oxy]ethyl ester (CA INDEX NAME)



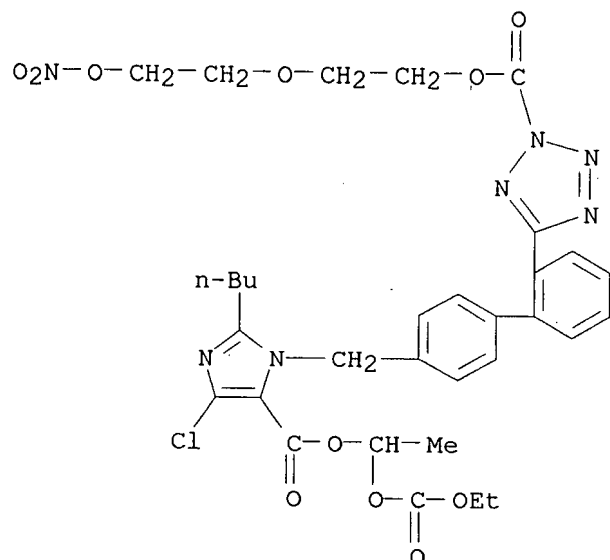
RN 902126-95-8 HCAPLUS

CN 1H-Imidazole-5-carboxylic acid, 2-butyl-4-chloro-1-[[2'-[2-[[[2-[[2-(nitrooxy)ethyl]thio]ethoxy]carbonyl]oxy]methyl]-2H-tetrazol-5-yl][1,1'-biphenyl]-4-yl]methyl]-, 1-[(ethoxycarbonyl)oxy]ethyl ester (CA INDEX NAME)



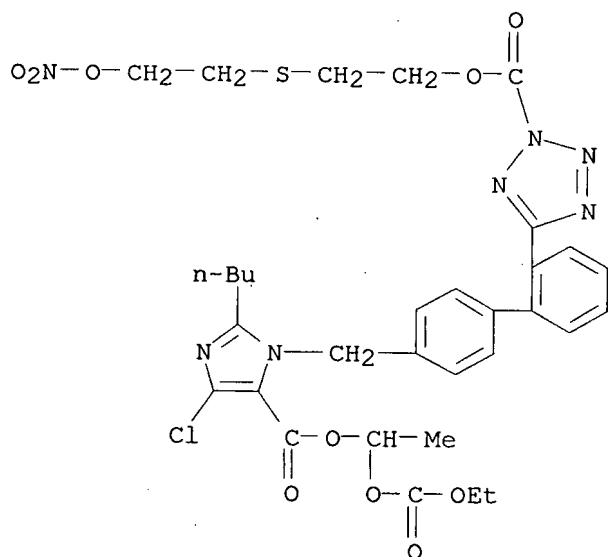
RN 902126-97-0 HCAPLUS

CN 2H-Tetrazole-2-carboxylic acid, 5-[4'-[[2-butyl-4-chloro-5-[[1-[(ethoxycarbonyl)oxy]ethoxy]carbonyl]-1H-imidazol-1-yl]methyl][1,1'-biphenyl]-2-yl]-, 2-[2-(nitrooxy)ethoxy]ethyl ester (CA INDEX NAME)



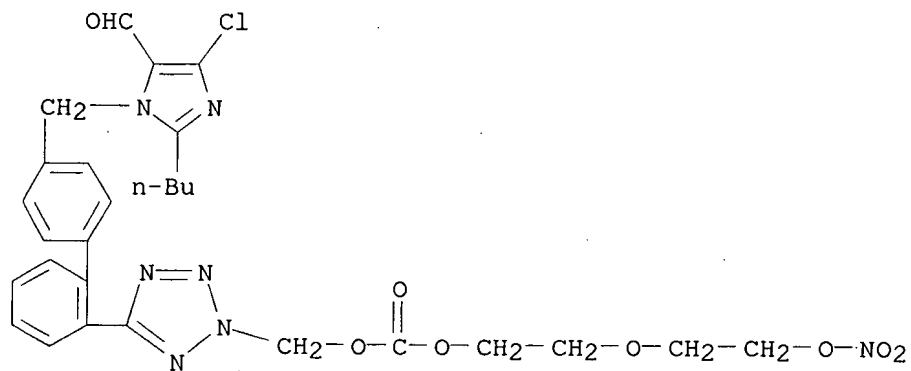
RN 902126-98-1 HCAPLUS

CN 2H-Tetrazole-2-carboxylic acid, 5-[4'-[[2-butyl-4-chloro-5-[[1-[(ethoxycarbonyl)oxy]ethoxy]carbonyl]-1H-imidazol-1-yl]methyl][1,1'-biphenyl]-2-yl]-, 2-[[2-(nitrooxy)ethyl]thio]ethyl ester (CA INDEX NAME)



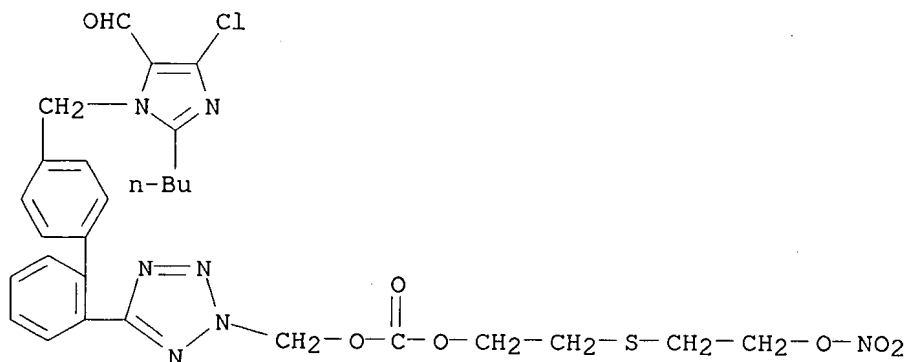
RN 902127-16-6 HCAPLUS

CN Carbonic acid, [5-[4'-[(2-butyl-4-chloro-5-formyl-1H-imidazol-1-yl)methyl][1,1'-biphenyl]-2-yl]-2H-tetrazol-2-yl]methyl 2-[[2-(nitrooxy)ethoxy]ethyl ester (9CI) (CA INDEX NAME)



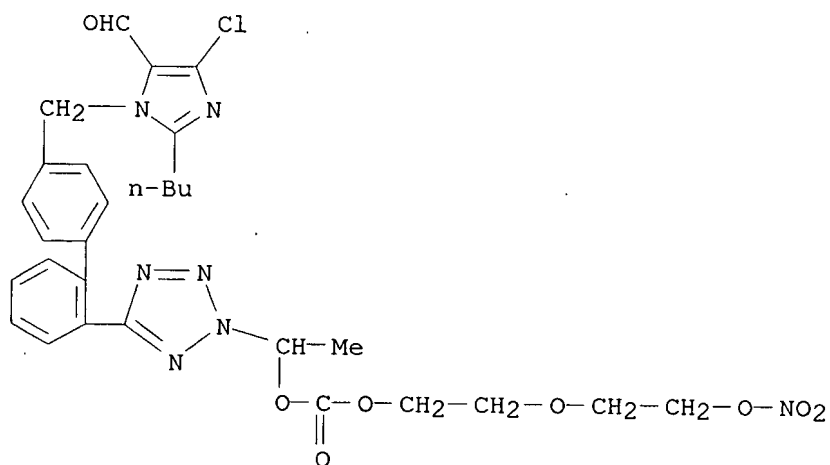
RN 902127-17-7 HCAPLUS

CN Carbonic acid, [5-[4'-[(2-butyl-4-chloro-5-formyl-1H-imidazol-1-yl)methyl][1,1'-biphenyl]-2-yl]-2H-tetrazol-2-yl)methyl 2-[[2-(nitrooxy)ethyl]thio]ethyl ester (9CI) (CA INDEX NAME)

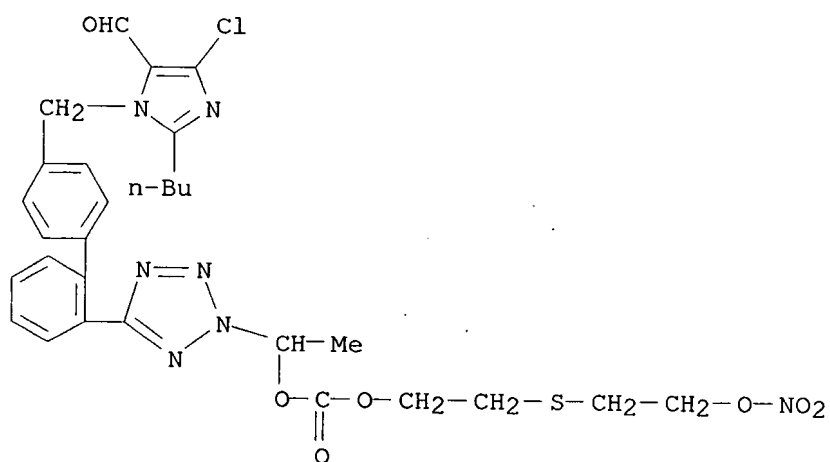


RN 902127-18-8 HCAPLUS

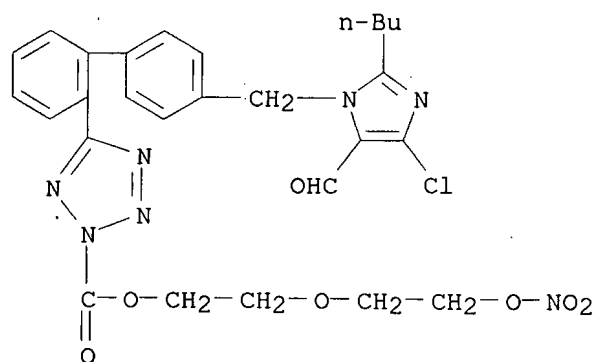
CN Carbonic acid, 1-[5-[4'-[(2-butyl-4-chloro-5-formyl-1H-imidazol-1-yl)methyl][1,1'-biphenyl]-2-yl]-2H-tetrazol-2-yl]ethyl 2-[2-(nitrooxy)ethoxy]ethyl ester (9CI) (CA INDEX NAME)



RN 902127-19-9 HCAPLUS  
 CN Carbonic acid, 1-[5-[4'-[(2-butyl-4-chloro-5-formyl-1H-imidazol-1-yl)methyl][1,1'-biphenyl]-2-yl]-2H-tetrazol-2-yl]ethyl 2-[[2-(nitrooxy)ethyl]thio]ethyl ester (9CI) (CA INDEX NAME)

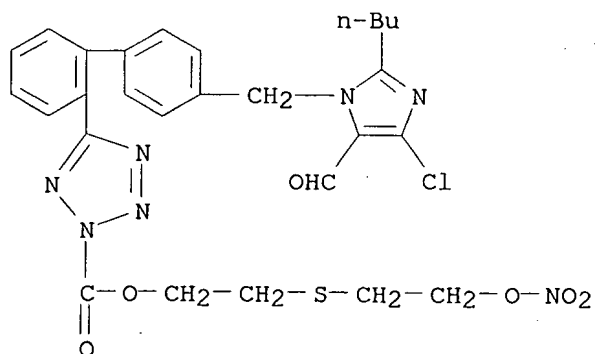


RN 902127-38-2 HCAPLUS  
 CN 2H-Tetrazole-2-carboxylic acid, 5-[4'-[(2-butyl-4-chloro-5-formyl-1H-imidazol-1-yl)methyl][1,1'-biphenyl]-2-yl]-, 2-[[2-(nitrooxy)ethoxy]ethyl ester (CA INDEX NAME)



RN 902127-39-3 HCAPLUS

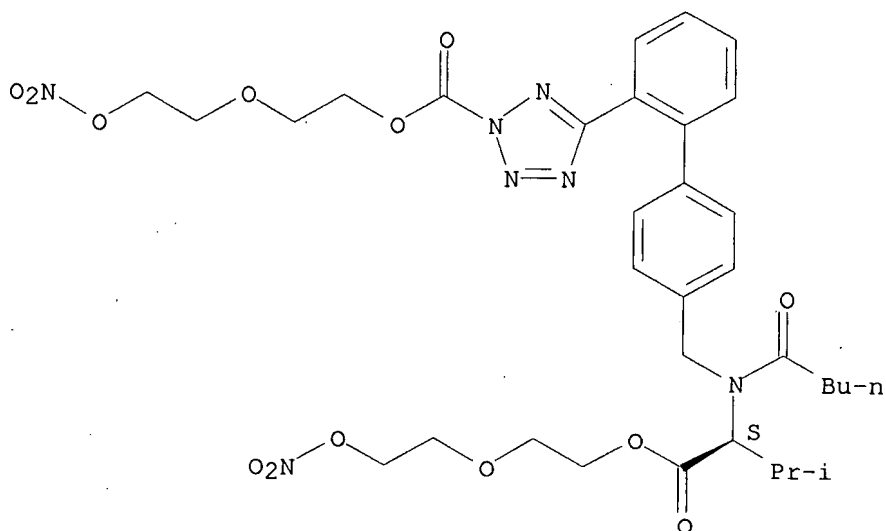
CN 2H-Tetrazole-2-carboxylic acid, 5-[4'-[(2-butyl-4-chloro-5-formyl-1H-imidazol-1-yl)methyl][1,1'-biphenyl]-2-yl]-, 2-[[2-(nitrooxy)ethyl]thio]ethyl ester (CA INDEX NAME)



RN 902127-50-8 HCAPLUS

CN 2H-Tetrazole-2-carboxylic acid, 5-[4'-[[[(1S)-2-methyl-1-[[2-[2-(nitrooxy)ethoxy]ethoxy]carbonyl]propyl](1-oxopentyl)amino]methyl][1,1'-biphenyl]-2-yl]-, 2-[2-(nitrooxy)ethoxy]ethyl ester (CA INDEX NAME)

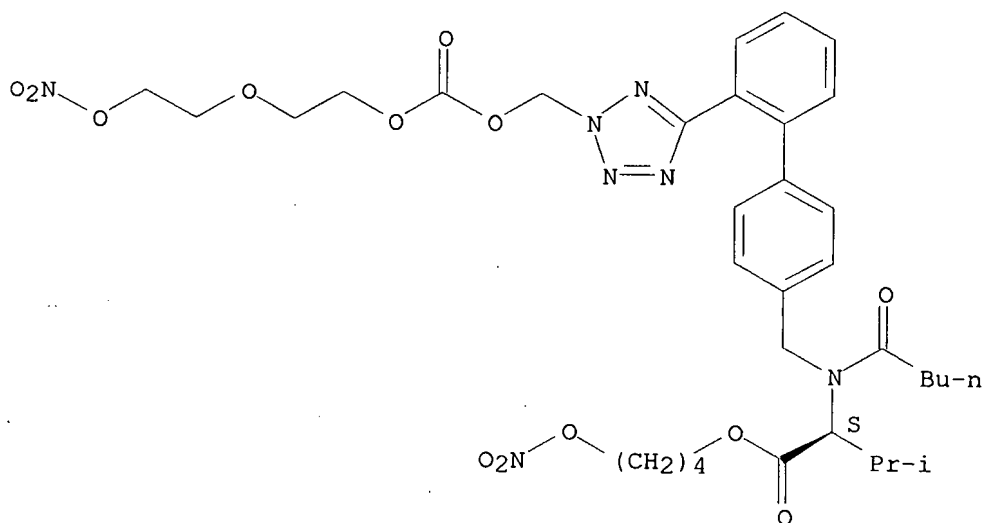
Absolute stereochemistry.



RN 902127-80-4 HCAPLUS

CN L-Valine, N-[[2'-[2-[[[2-[2-(nitrooxy)ethoxy]ethoxy]carbonyl]oxy]methyl]-2H-tetrazol-5-yl][1,1'-biphenyl]-4-yl]methyl]-N-(1-oxopentyl)-, 4-(nitrooxy)butyl ester (CA INDEX NAME)

Absolute stereochemistry.

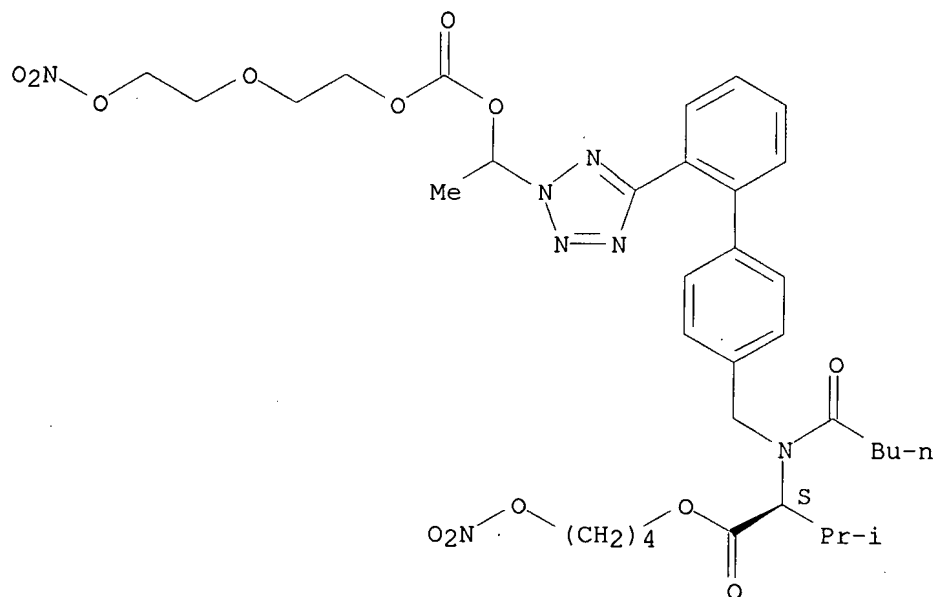


RN 902127-81-5 HCAPLUS

CN L-Valine, N-[[2'-[2-[1-[[[2-[2-(nitrooxy)ethoxy]ethoxy]carbonyl]oxy]ethyl]-2H-tetrazol-5-yl][1,1'-biphenyl]-4-yl]methyl]-N-(1-oxopentyl)-, 4-(nitrooxy)butyl ester (CA INDEX NAME)

Absolute stereochemistry.

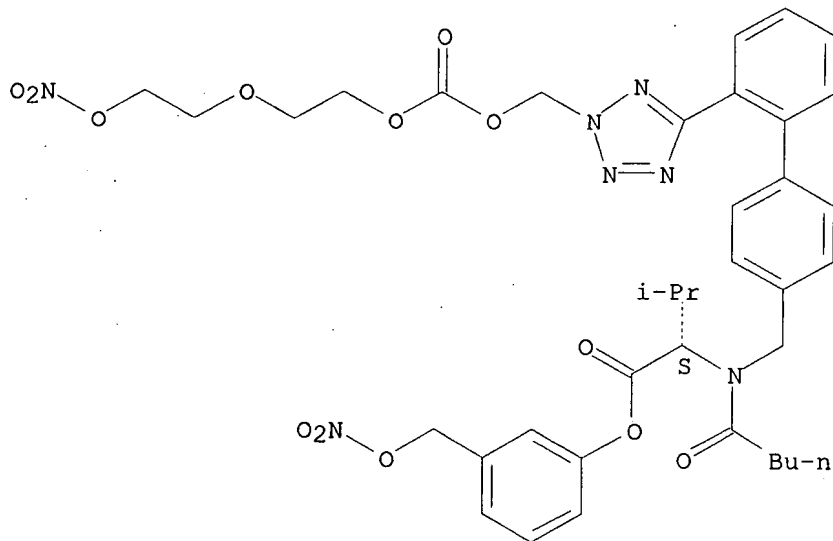




RN 902127-82-6 HCAPLUS

CN L-Valine, N-[[2'-[2-[[[2-[2-(nitrooxy)ethoxy]ethoxy]carbonyl]oxy]methyl]-2H-tetrazol-5-yl][1,1'-biphenyl]-4-yl]methyl]-N-(1-oxopentyl)-, 3-[(nitrooxy)methyl]phenyl ester (CA INDEX NAME)

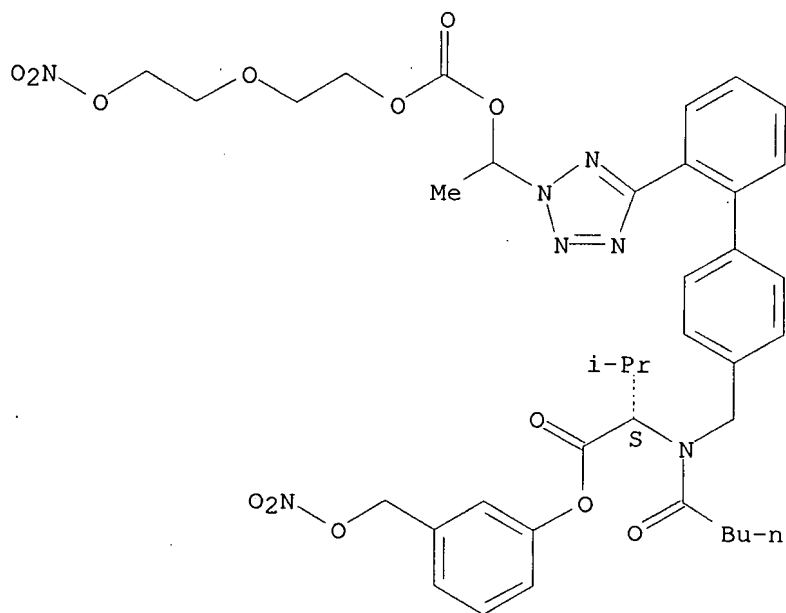
Absolute stereochemistry.



RN 902127-83-7 HCAPLUS

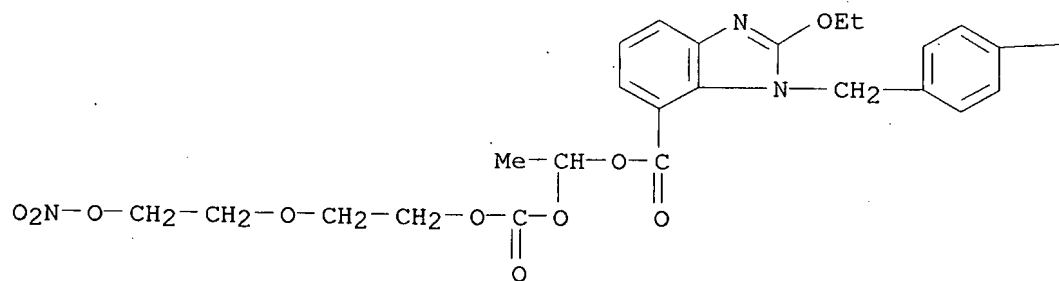
CN L-Valine, N-[[2'-[2-[1-[[[2-[2-(nitrooxy)ethoxy]ethoxy]carbonyl]oxy]ethyl]-2H-tetrazol-5-yl][1,1'-biphenyl]-4-yl]methyl]-N-(1-oxopentyl)-, 3-[(nitrooxy)methyl]phenyl ester (CA INDEX NAME)

Absolute stereochemistry.

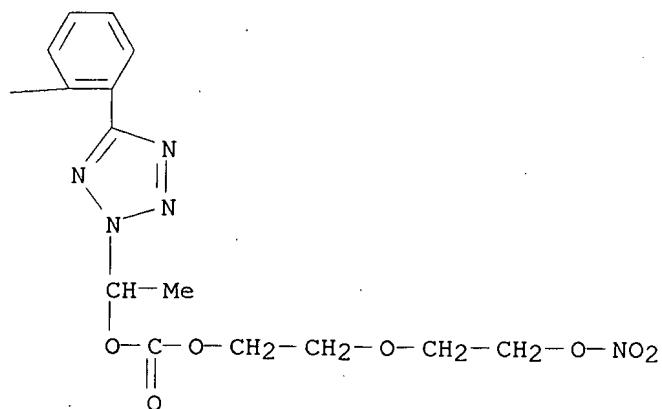


RN 902128-08-9 HCAPLUS  
 CN 1H-Benzimidazole-7-carboxylic acid, 2-ethoxy-1-[[2'-[2-[1-[[2-[2-(nitrooxy)ethoxy]ethoxy]carbonyl]oxy]ethyl]-2H-tetrazol-5-yl]][1,1'-biphenyl]-4-yl]methyl]-, 1-[[[2-[2-(nitrooxy)ethoxy]ethoxy]carbonyl]oxy]ethyl ester (CA INDEX NAME)

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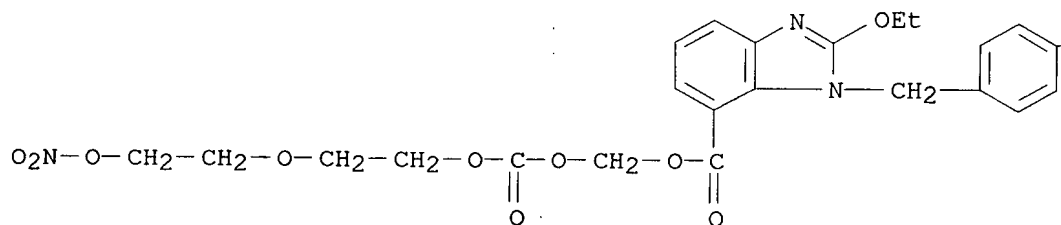
PAGE 1-B



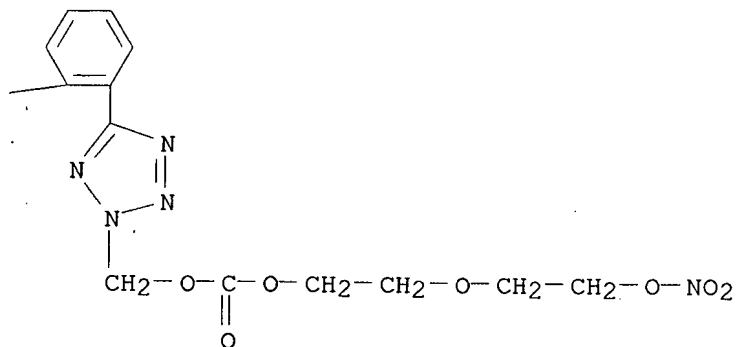
RN 902128-09-0 HCAPLUS

CN 1H-Benzimidazole-7-carboxylic acid, 2-ethoxy-1-[[2'-[2-[[[2-[2-(nitrooxy)ethoxy]ethoxy]carbonyl]oxy]methyl]-2H-tetrazol-5-yl][1,1'-biphenyl]-4-yl]methyl]-, [[[2-[2-(nitrooxy)ethoxy]ethoxy]carbonyl]oxy]methyl ester (CA INDEX NAME)

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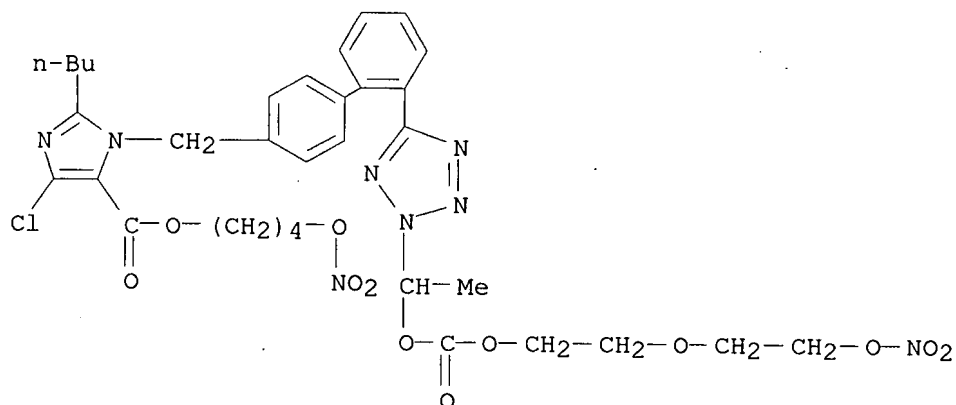
PAGE 1-B



RN 902128-25-0 HCAPLUS

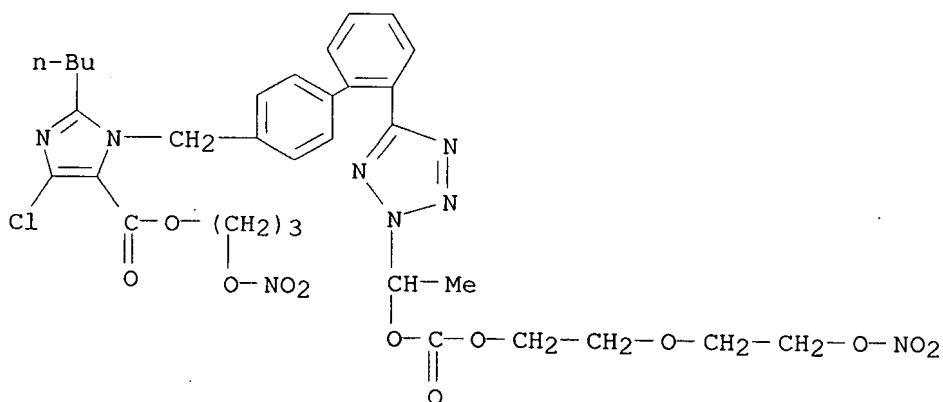
CN 1H-Imidazole-5-carboxylic acid, 2-butyl-4-chloro-1-[[2'-[2-[1-[[[2-[2-

(nitrooxy)ethoxy]ethoxy]carbonyl]oxy]ethyl]-2H-tetrazol-5-yl][1,1'-biphenyl]-4-yl]methyl]-, 4-(nitrooxy)butyl ester (CA INDEX NAME)



RN 902128-26-1 HCAPLUS

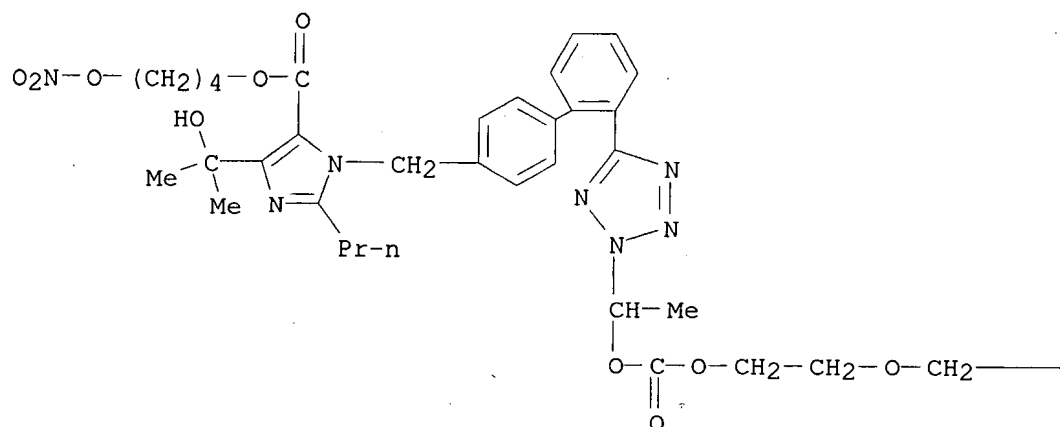
CN 1H-Imidazole-5-carboxylic acid, 2-butyl-4-chloro-1-[[2'-[2-[1-[[[2-[2-(nitrooxy)ethoxy]ethoxy]carbonyl]oxy]ethyl]-2H-tetrazol-5-yl][1,1'-biphenyl]-4-yl]methyl]-, 3-(nitrooxy)propyl ester (CA INDEX NAME)



RN 902128-34-1 HCAPLUS

CN 1H-Imidazole-5-carboxylic acid, 4-(1-hydroxy-1-methylethyl)-1-[[2'-[2-[1-[[[2-[2-(nitrooxy)ethoxy]ethoxy]carbonyl]oxy]ethyl]-2H-tetrazol-5-yl][1,1'-biphenyl]-4-yl]methyl]-2-propyl-, 4-(nitrooxy)butyl ester (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

—CH<sub>2</sub>—O—NO<sub>2</sub>

L13 ANSWER 8 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN

IT 754241-98-0

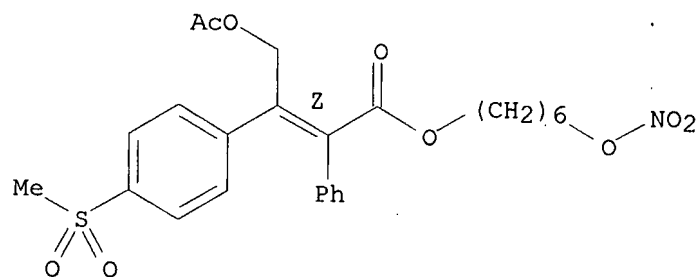
RL: ANT (Analyte); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(identification of colored impurity in drug substance by preparative HPLC)

RN 754241-98-0 HCAPLUS

CN Benzeneacetic acid,  $\alpha$ -[2-(acetyloxy)-1-[4-(methylsulfonyl)phenyl]ethylidene]-, 6-(nitrooxy)hexyl ester, ( $\alpha$ Z)-(9CI) (CA INDEX NAME)

Double bond geometry as shown.



L13 ANSWER 9 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN

IT 754241-98-0P

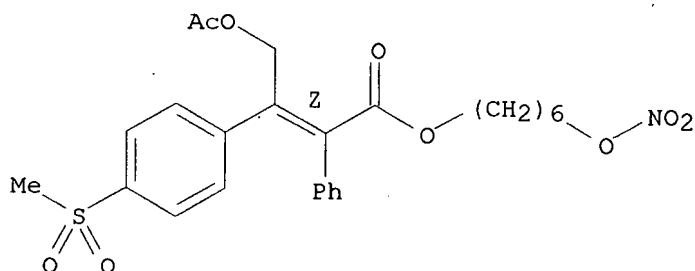
RL: SPN (Synthetic preparation); PREP (Preparation)

(synthesis of a NO-releasing prodrug of rofecoxib in five chemical steps from 3-phenyl-2-propyn-1-ol)

RN 754241-98-0 HCAPLUS

CN Benzeneacetic acid,  $\alpha$ -[2-(acetyloxy)-1-[4-(methylsulfonyl)phenyl]ethylidene]-, 6-(nitrooxy)hexyl ester, ( $\alpha$ Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



L13 ANSWER 10 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN

IT 754241-98-0P

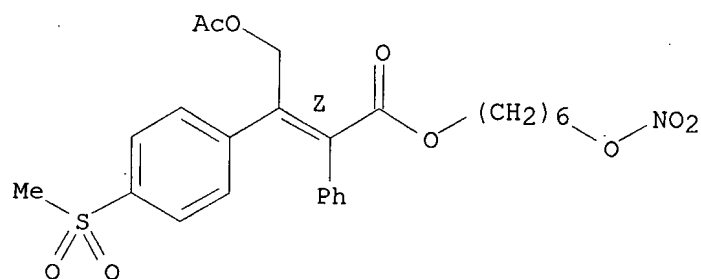
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of nitric oxide releasing prodrugs of diaryl-2-(5H)-furanones as cyclooxygenase-2 inhibitors)

RN 754241-98-0 HCAPLUS

CN Benzeneacetic acid,  $\alpha$ -[2-(acetyloxy)-1-[4-(methylsulfonyl)phenyl]ethylidene]-, 6-(nitrooxy)hexyl ester, ( $\alpha$ Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



L13 ANSWER 11 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN

IT 861655-83-6P 861655-84-7P 861655-85-8P

861655-86-9P

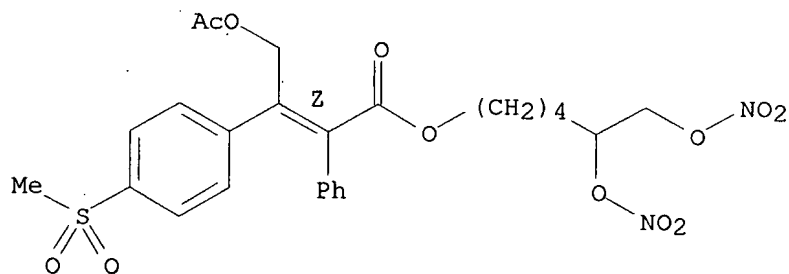
RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of nitric oxide releasing prodrugs of diaryl-2(5H)-furanones as cyclooxygenase-2 inhibitors)

RN 861655-83-6 HCAPLUS

CN Benzeneacetic acid,  $\alpha$ -[2-(acetyloxy)-1-[4-(methylsulfonyl)phenyl]ethylidene]-, 5,6-bis(nitrooxy)hexyl ester, ( $\alpha Z$ )- (CA INDEX NAME)

Double bond geometry as shown.

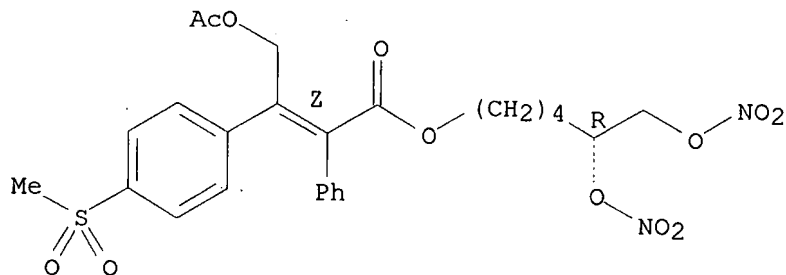


RN 861655-84-7 HCAPLUS

CN Benzeneacetic acid,  $\alpha$ -[2-(acetyloxy)-1-[4-(methylsulfonyl)phenyl]ethylidene]-, (5R)-5,6-bis(nitrooxy)hexyl ester, ( $\alpha Z$ )- (CA INDEX NAME)

Absolute stereochemistry.

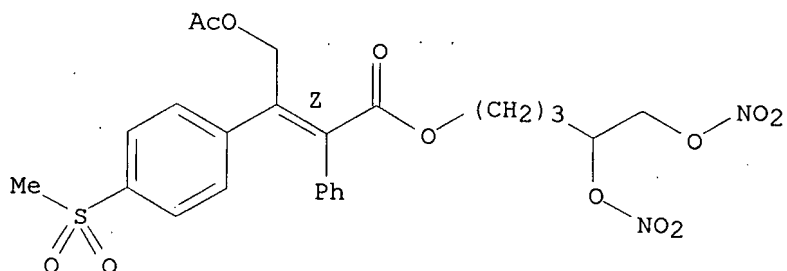
Double bond geometry as shown.



RN 861655-85-8 HCAPLUS

CN Benzeneacetic acid,  $\alpha$ -[2-(acetyloxy)-1-[4-(methylsulfonyl)phenyl]ethylidene]-, 4,5-bis(nitrooxy)pentyl ester, ( $\alpha$ Z)- (CA INDEX NAME)

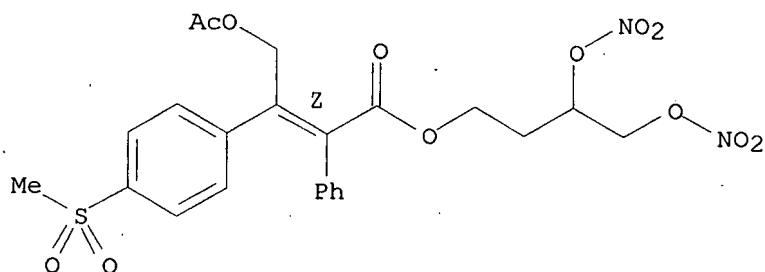
Double bond geometry as shown.



RN 861655-86-9 HCAPLUS

CN Benzeneacetic acid,  $\alpha$ -[2-(acetyloxy)-1-[4-(methylsulfonyl)phenyl]ethylidene]-, 3,4-bis(nitrooxy)butyl ester, ( $\alpha$ Z)- (CA INDEX NAME)

Double bond geometry as shown.



L13 ANSWER 12 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN

IT 860005-22-7P 860005-23-8P 860005-35-2P

860005-36-3P 860005-41-0P 860005-42-1P

860005-53-4P 860005-54-5P 860005-59-0P

860005-60-3P 860005-71-6P 860005-72-7P

860005-77-2P 860005-78-3P 860005-89-6P



860005-90-9P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

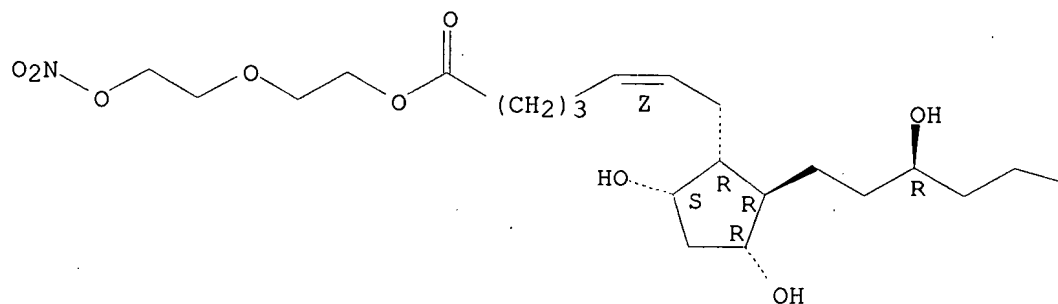
(preparation of prostaglandin nitrooxy derivs. for treatment of glaucoma)

RN 860005-22-7 HCAPLUS

CN 5-Heptenoic acid, 7-[(1R,2R,3R,5S)-3,5-dihydroxy-2-[(3R)-3-hydroxy-5-phenylpentyl]cyclopentyl]-, 2-[2-(nitrooxy)ethoxy]ethyl ester, (5Z)- (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.

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PAGE 1-B

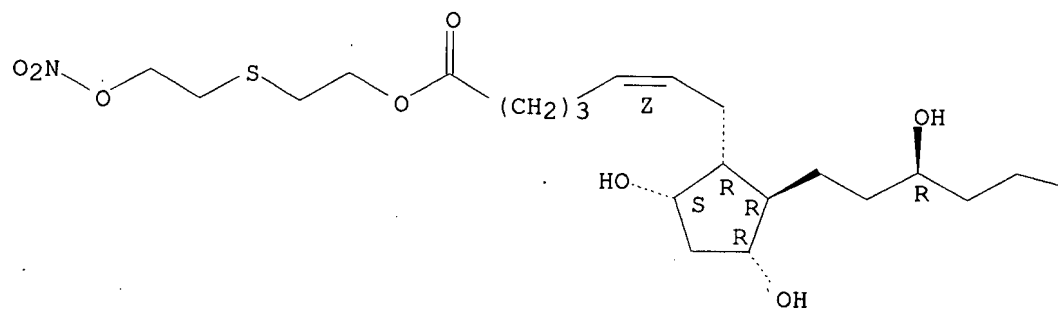
— Ph

RN 860005-23-8 HCAPLUS

CN 5-Heptenoic acid, 7-[(1R,2R,3R,5S)-3,5-dihydroxy-2-[(3R)-3-hydroxy-5-phenylpentyl]cyclopentyl]-, 2-[[2-(nitrooxy)ethyl]thio]ethyl ester, (5Z)- (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.

PAGE 1-A



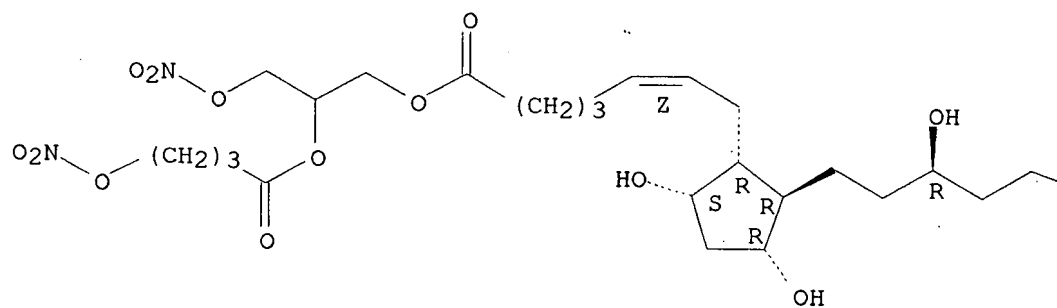
PAGE 1-B

—Ph

RN 860005-35-2 HCAPLUS  
 CN 5-Heptenoic acid, 7-[(1R,2R,3R,5S)-3,5-dihydroxy-2-[(3R)-3-hydroxy-5-phenylpentyl]cyclopentyl]-, 3-(nitrooxy)-2-[4-(nitrooxy)-1-oxobutoxy]propyl ester, (5Z)- (CA INDEX NAME)

Absolute stereochemistry.  
 Double bond geometry as shown.

PAGE 1-A

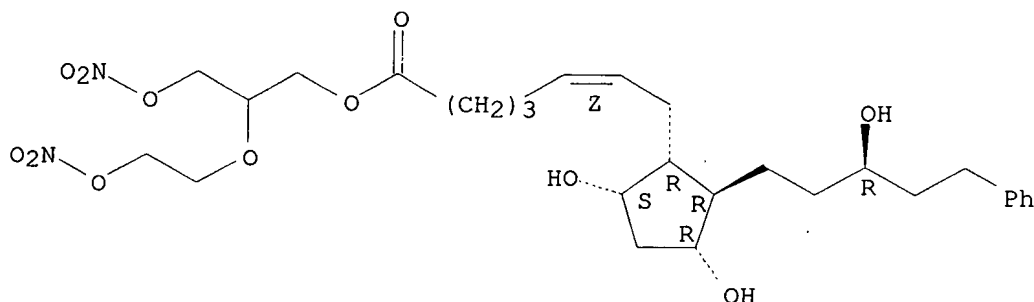


Ph

RN 860005-36-3 HCAPLUS

CN 5-Heptenoic acid, 7-[(1R,2R,3R,5S)-3,5-dihydroxy-2-[(3R)-3-hydroxy-5-phenylpentyl]cyclopentyl]-, 3-(nitrooxy)-2-[2-(nitrooxy)ethoxy]propyl ester, (5Z)- (CA INDEX NAME)

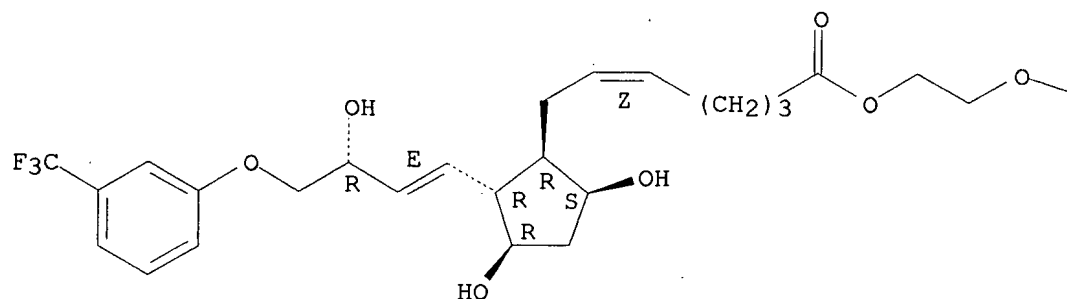
Absolute stereochemistry.  
Double bond geometry as shown.



RN 860005-41-0 HCAPLUS

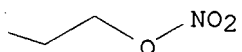
CN 5-Heptenoic acid, 7-[(1R,2R,3R,5S)-3,5-dihydroxy-2-[(1E,3R)-3-hydroxy-4-[3-(trifluoromethyl)phenoxy]-1-butenyl]cyclopentyl]-, 2-[2-(nitrooxy)ethoxy]ethyl ester, (5Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.



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PAGE 1-B

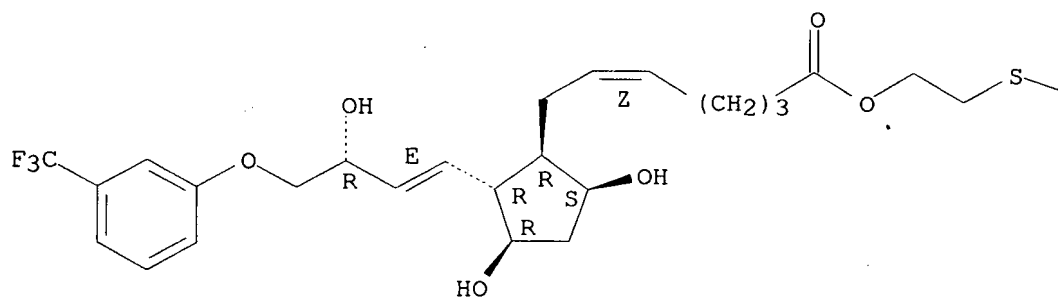


RN 860005-42-1 HCAPLUS

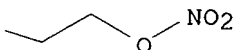
CN 5-Heptenoic acid, 7-[(1R,2R,3R,5S)-3,5-dihydroxy-2-[(1E,3R)-3-hydroxy-4-[3-(trifluoromethyl)phenoxy]-1-butenyl]cyclopentyl]-, 2-[[2-(nitrooxy)ethyl]thio]ethyl ester, (5Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.

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PAGE 1-B

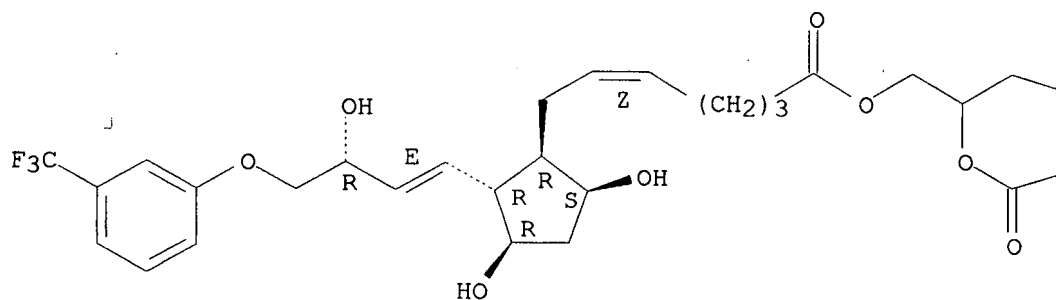


RN 860005-53-4 HCAPLUS

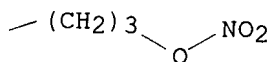
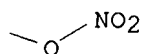
CN 5-Heptenoic acid, 7-[(1R,2R,3R,5S)-3,5-dihydroxy-2-[(1E,3R)-3-hydroxy-4-[3-(trifluoromethyl)phenoxy]-1-butenyl]cyclopentyl]-, 3-(nitrooxy)-2-[4-(nitrooxy)-1-oxobutoxy]propyl ester, (5Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.

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PAGE 1-B



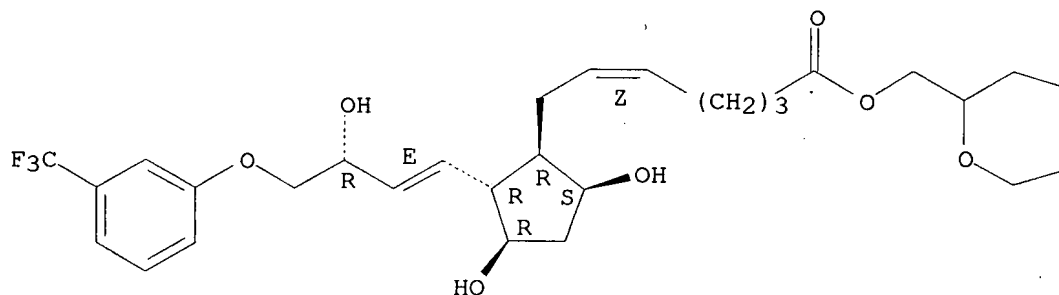
RN 860005-54-5 HCAPLUS

CN 5-Heptenoic acid, 7-[(1R,2R,3R,5S)-3,5-dihydroxy-2-[(1E,3R)-3-hydroxy-4-[3-(trifluoromethyl)phenoxy]-1-butenyl]cyclopentyl]-, 3-(nitrooxy)-2-[2-(nitrooxy)ethoxy]propyl ester, (5Z)- (9CI) (CA INDEX NAME)

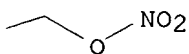
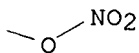
Absolute stereochemistry.

Double bond geometry as shown.

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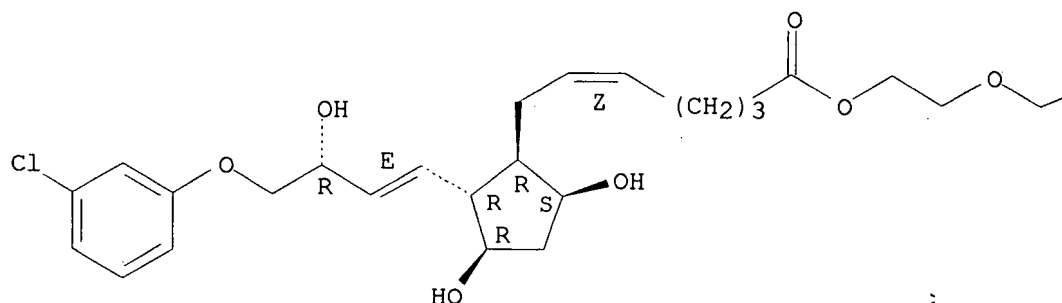
RN 860005-59-0 HCAPLUS

CN 5-Heptenoic acid, 7-[(1R,2R,3R,5S)-2-[(1E,3R)-4-(3-chlorophenoxy)-3-hydroxy-1-butenyl]-3,5-dihydroxycyclopentyl]-, 2-[2-(nitrooxy)ethoxy]ethyl ester, (5Z)- (9CI) (CA INDEX NAME)

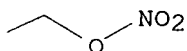
Absolute stereochemistry.

Double bond geometry as shown.

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PAGE 1-B



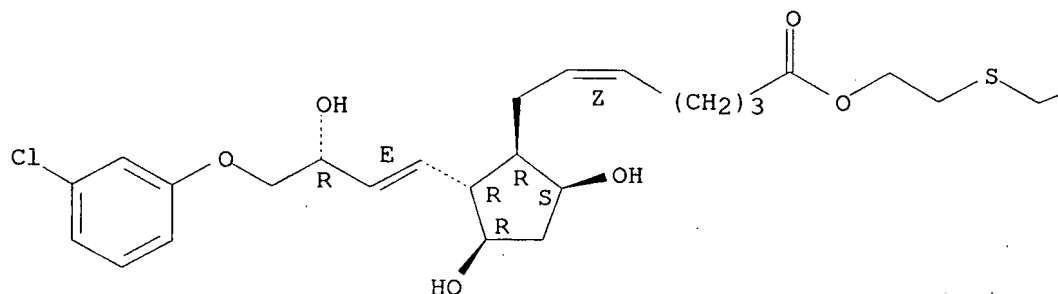
RN 860005-60-3 HCAPLUS

CN 5-Heptenoic acid, 7-[(1R,2R,3R,5S)-2-[(1E,3R)-4-(3-chlorophenoxy)-3-hydroxy-1-butenyl]-3,5-dihydroxycyclopentyl]-, 2-[[2-(nitrooxy)ethyl]thio]ethyl ester, (5Z)- (9CI) (CA INDEX NAME)

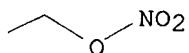
Absolute stereochemistry.

Double bond geometry as shown.

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PAGE 1-B

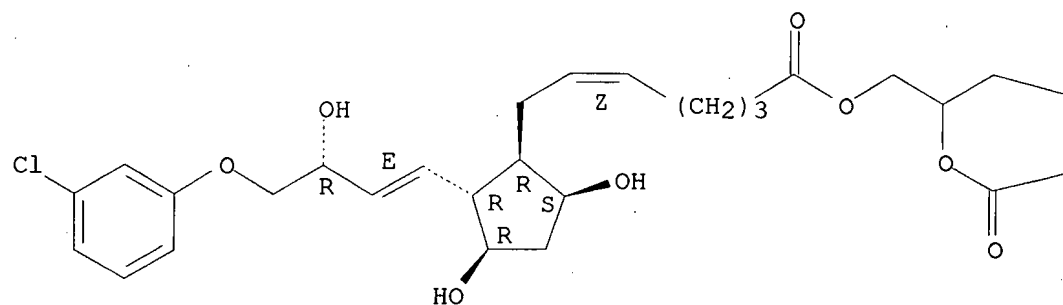


RN 860005-71-6 HCAPLUS

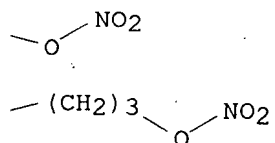
CN 5-Heptenoic acid, 7-[(1R,2R,3R,5S)-2-[(1E,3R)-4-(3-chlorophenoxy)-3-hydroxy-1-butenyl]-3,5-dihydroxycyclopentyl]-, 3-(nitrooxy)-2-[4-(nitrooxy)-1-oxobutoxy]propyl ester, (5Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.

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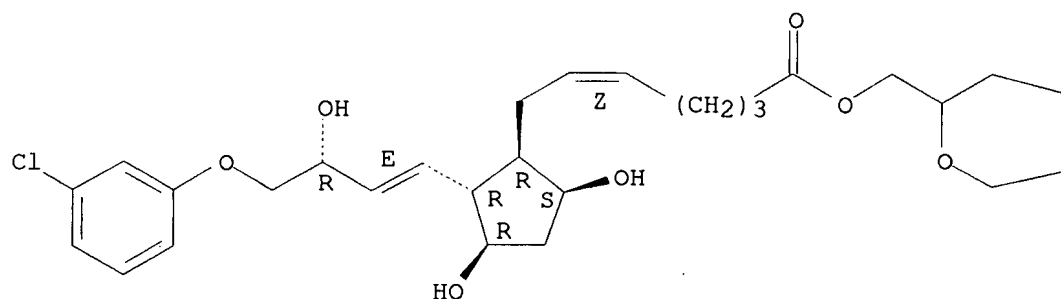


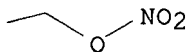
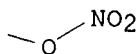
RN 860005-72-7 HCAPLUS

CN 5-Heptenoic acid, 7-[(1R,2R,3R,5S)-2-[(1E,3R)-4-(3-chlorophenoxy)-3-hydroxy-1-butenyl]-3,5-dihydroxycyclopentyl]-, 3-(nitrooxy)-2-[2-(nitrooxy)ethoxy]propyl ester, (5Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.

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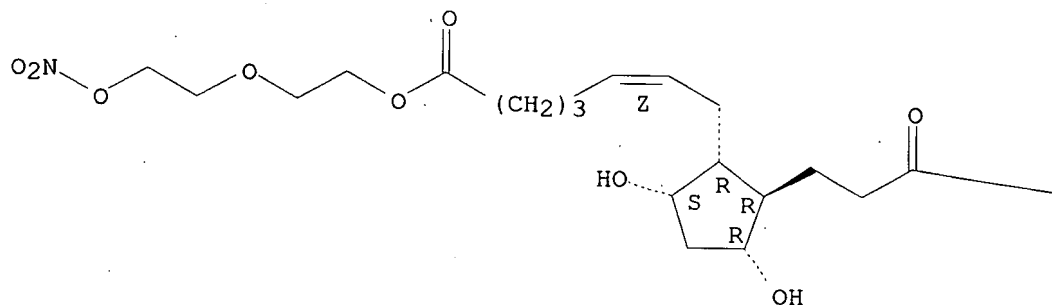


RN 860005-77-2 HCAPLUS

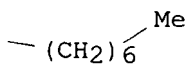
CN 5-Heptenoic acid, 7-[(1R,2R,3R,5S)-3,5-dihydroxy-2-(3-oxodecyl)cyclopentyl]-, 2-[2-(nitrooxy)ethoxy]ethyl ester, (5Z)-(9CI)  
(CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.

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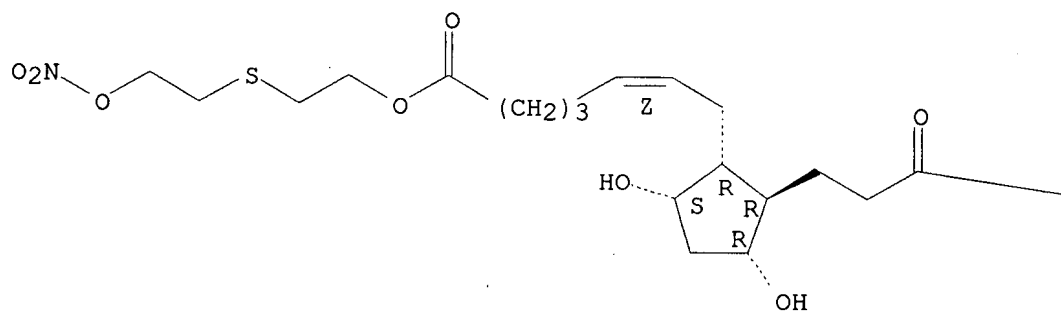
RN 860005-78-3 HCAPLUS

CN 5-Heptenoic acid, 7-[(1R,2R,3R,5S)-3,5-dihydroxy-2-(3-oxodecyl)cyclopentyl]-, 2-[[2-(nitrooxy)ethyl]thio]ethyl ester, (5Z)-(9CI) (CA INDEX NAME)

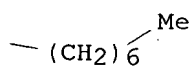
Absolute stereochemistry.  
Double bond geometry as shown.



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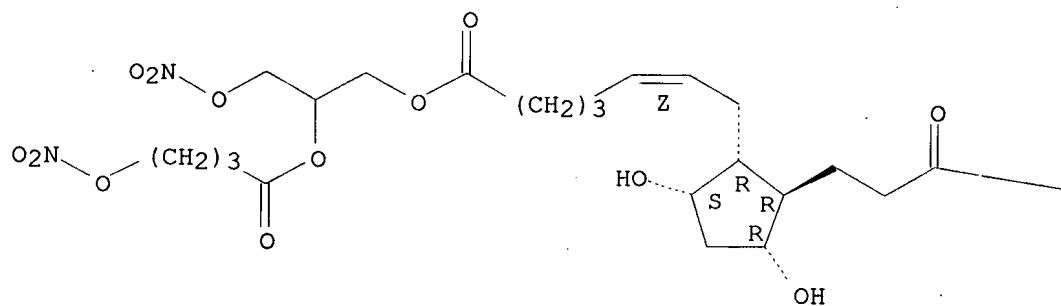


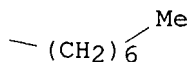
RN 860005-89-6 HCAPLUS

CN 5-Heptenoic acid, 7-[(1R,2R,3R,5S)-3,5-dihydroxy-2-(3-oxodecyl)cyclopentyl]-, 3-(nitrooxy)-2-[4-(nitrooxy)-1-oxobutoxy]propyl ester, (5Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.

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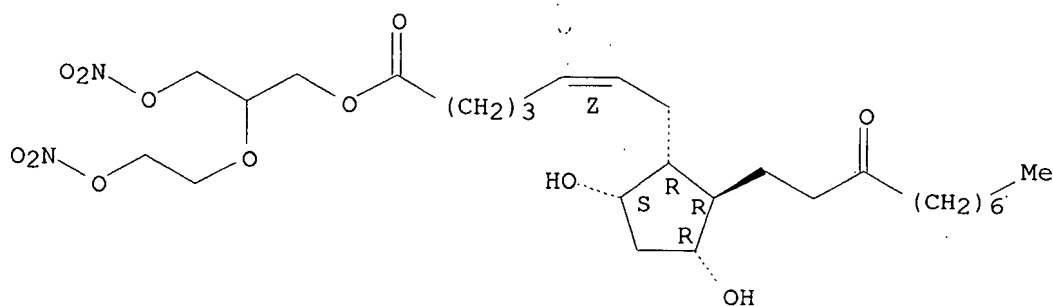




RN 860005-90-9 HCAPLUS

CN 5-Heptenoic acid, 7-[(1R,2R,3R,5S)-3,5-dihydroxy-2-(3-oxodecyl)cyclopentyl]-, 3-(nitrooxy)-2-[2-(nitrooxy)ethoxy]propyl ester, (5Z)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.



L13 ANSWER 13 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN

IT 857465-04-4P 857465-05-5P 857465-25-9P

857465-26-0P

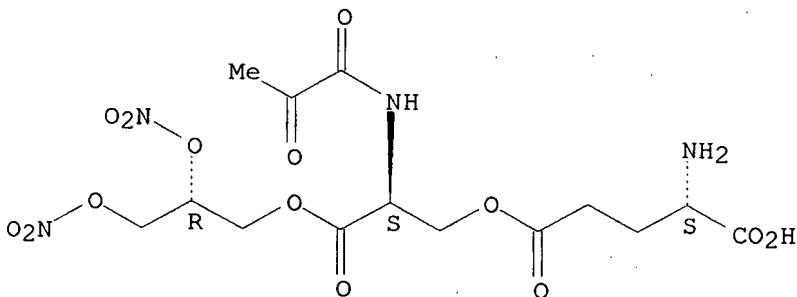
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of nitric oxide-releasing pyruvate compds. and compns. for treating cardiovascular and other diseases)

RN 857465-04-4 HCAPLUS

CN L-Glutamic acid, 5-[(2S)-3-[(2R)-2,3-bis(nitrooxy)propoxy]-2-[(1,2-dioxopropyl)amino]-3-oxopropyl] ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

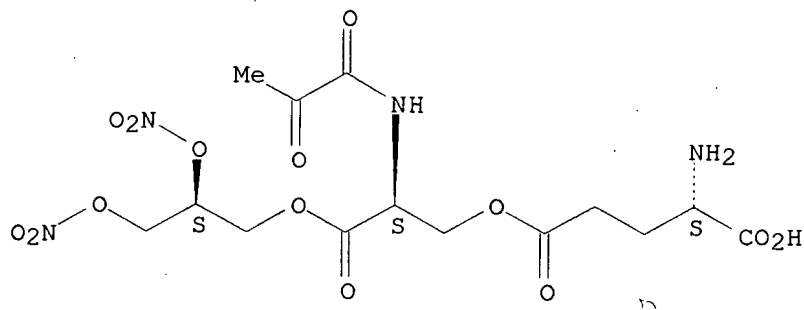


10/522986 NITROOXYALKYL SUBTD ESTERS

RN 857465-05-5 HCAPLUS

CN L-Glutamic acid, 5-[(2S)-3-[(2S)-2,3-bis(nitrooxy)propoxy]-2-[(1,2-dioxopropyl)amino]-3-oxopropyl] ester (9CI) (CA INDEX NAME)

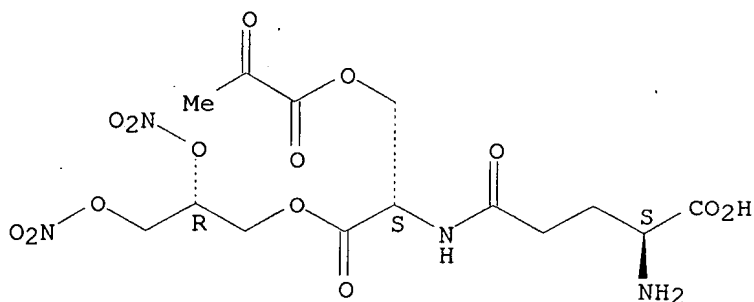
Absolute stereochemistry.



RN 857465-25-9 HCAPLUS

CN L-Serine, L-γ-glutamyl-, 2-[(2R)-2,3-bis(nitrooxy)propyl] ester, 2-oxopropanoate (ester) (9CI) (CA INDEX NAME)

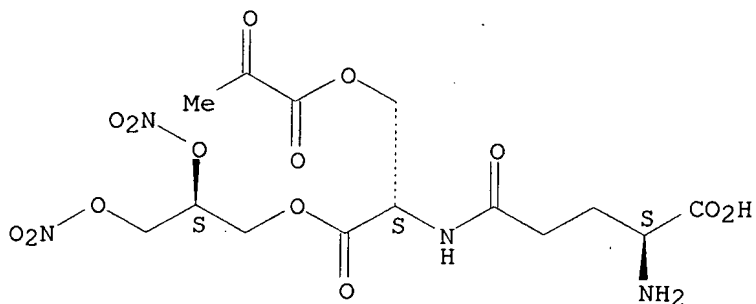
Absolute stereochemistry.



RN 857465-26-0 HCAPLUS

CN L-Serine, L-γ-glutamyl-, 2-[(2S)-2,3-bis(nitrooxy)propyl] ester, 2-oxopropanoate (ester) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L13 ANSWER 14 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN

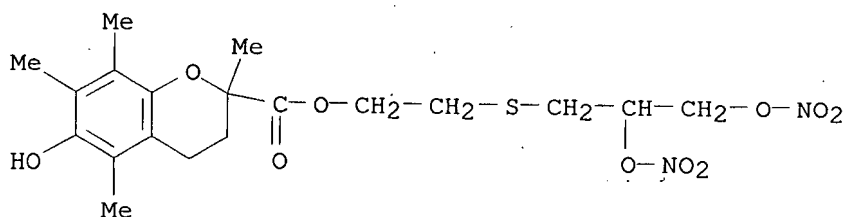
IT 854925-82-9P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(claimed compound; preparation of nitrate esters having  $\beta$ - or  $\gamma$ -sulfur atom for protection of cells/tissues from oxidative damage)

RN 854925-82-9 HCAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 3,4-dihydro-6-hydroxy-2,5,7,8-tetramethyl-, 2-[[2,3-bis(nitrooxy)propyl]thio]ethyl ester (9CI) (CA INDEX NAME)



L13 ANSWER 15 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN

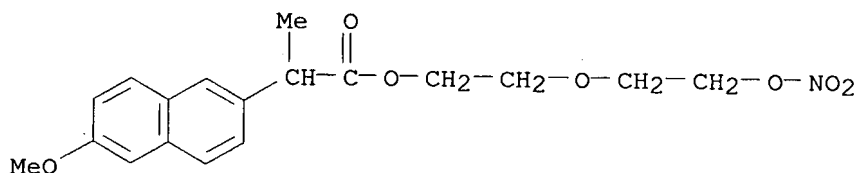
IT 174454-51-4

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(nitrosylated analgesic and/or antiinflammatory drugs having antiviral activity)

RN 174454-51-4 HCAPLUS

CN 2-Naphthaleneacetic acid, 6-methoxy- $\alpha$ -methyl-, 2-[2-(nitrooxy)ethoxy]ethyl ester (CA INDEX NAME)



L13 ANSWER 16 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN

IT 849138-32-5P

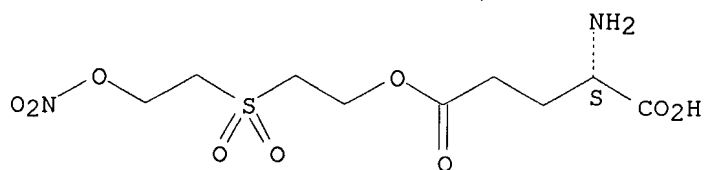
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of nitrosated glutamic acid compds. for use in pharmaceutical compns.)

RN 849138-32-5 HCAPLUS

CN L-Glutamic acid, 5-[2-[[2-(nitrooxy)ethyl]sulfonyl]ethyl] ester, monohydrochloride (9CI) (CA INDEX NAME)

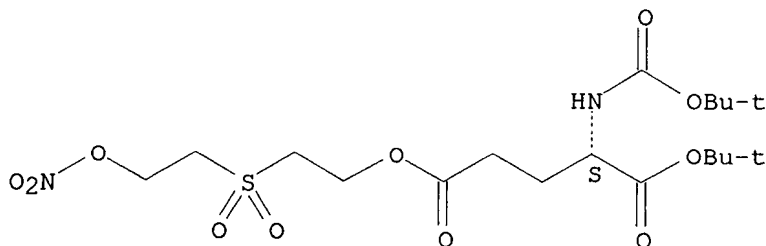
Absolute stereochemistry.



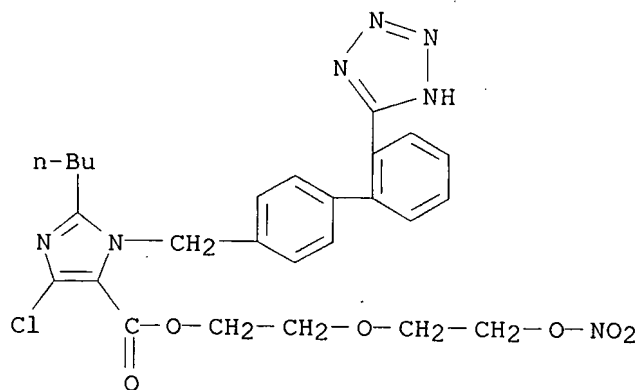
● HCl

IT 849138-62-1P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation of nitrosated glutamic acid compds. for use in pharmaceutical compns.)  
 RN 849138-62-1 HCAPLUS  
 CN L-Glutamic acid, N-[(1,1-dimethylethoxy)carbonyl]-, 1-(1,1-dimethylethyl) 5-[2-[[2-(nitrooxy)ethyl]sulfonyl]ethyl] ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

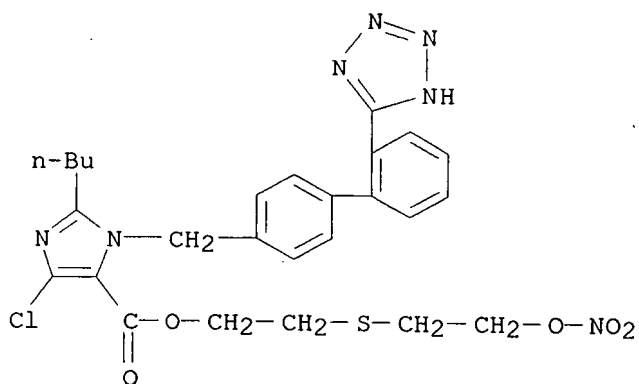


L13 ANSWER 17 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN  
 IT 838876-44-1 838876-47-4 838877-11-5  
 838877-15-9 838877-26-2 838877-30-8  
 838877-74-0 838877-77-3 838878-05-0  
 838878-07-2 838878-41-4 838878-43-6  
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (preparation of nitro derivs. of heterocyclic compds. as angiotensin II receptor blockers for therapeutic use)  
 RN 838876-44-1 HCAPLUS  
 CN 1H-Imidazole-5-carboxylic acid, 2-butyl-4-chloro-1-[[2'-(1H-tetrazol-5-yl)[1,1'-biphenyl]-4-yl]methyl]-, 2-[2-(nitrooxy)ethoxy]ethyl ester (9CI) (CA INDEX NAME)



RN 838876-47-4 HCAPLUS

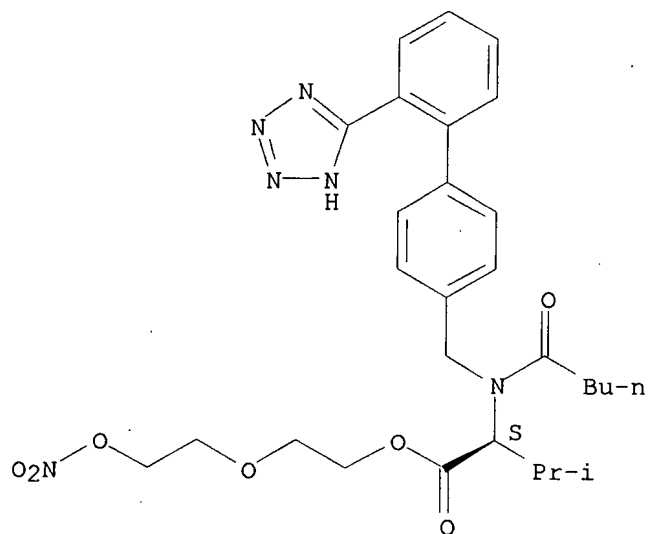
CN 1H-Imidazole-5-carboxylic acid, 2-butyl-4-chloro-1-[[2'-(1H-tetrazol-5-yl)[1,1'-biphenyl]-4-yl]methyl]-, 2-[[2-(nitrooxy)ethyl]thio]ethyl ester (9CI) (CA INDEX NAME)



RN 838877-11-5 HCAPLUS

CN L-Valine, N-(1-oxopentyl)-N-[[2'-(1H-tetrazol-5-yl)[1,1'-biphenyl]-4-yl]methyl]-, 2-[[2-(nitrooxy)ethoxy]ethyl] ester (9CI) (CA INDEX NAME)

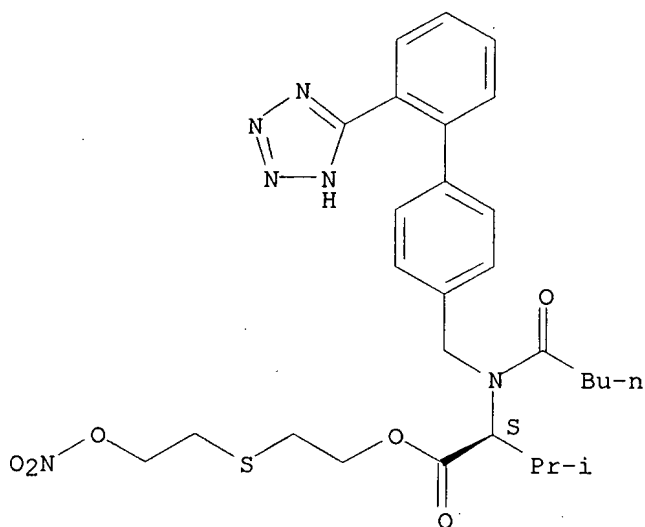
Absolute stereochemistry.



RN 838877-15-9 HCAPLUS

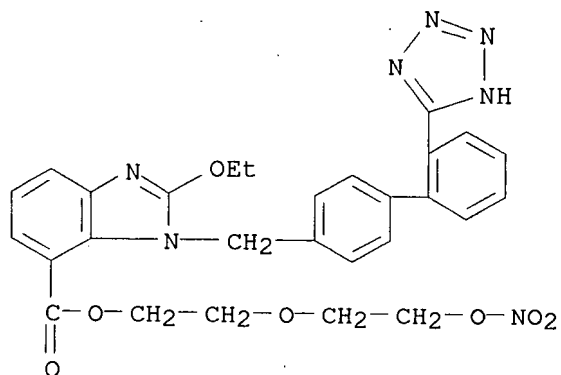
CN L-Valine, N-(1-oxopentyl)-N-[[2'-(1H-tetrazol-5-yl)[1,1'-biphenyl]-4-yl]methyl]-, 2-[[2-(nitrooxy)ethyl]thio]ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



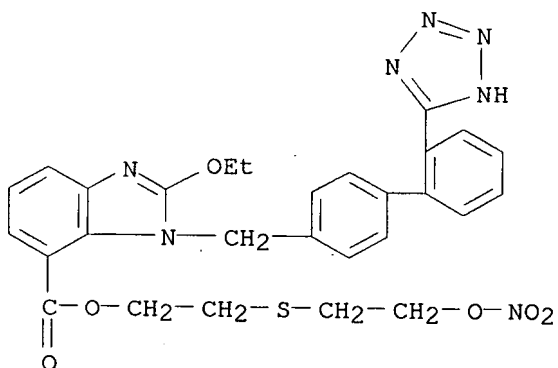
RN 838877-26-2 HCAPLUS

CN 1H-Benzimidazole-7-carboxylic acid, 2-ethoxy-1-[[2'-(1H-tetrazol-5-yl)[1,1'-biphenyl]-4-yl]methyl]-, 2-[[2-(nitrooxy)ethoxy]ethyl] ester (9CI) (CA INDEX NAME)



RN 838877-30-8 HCAPLUS

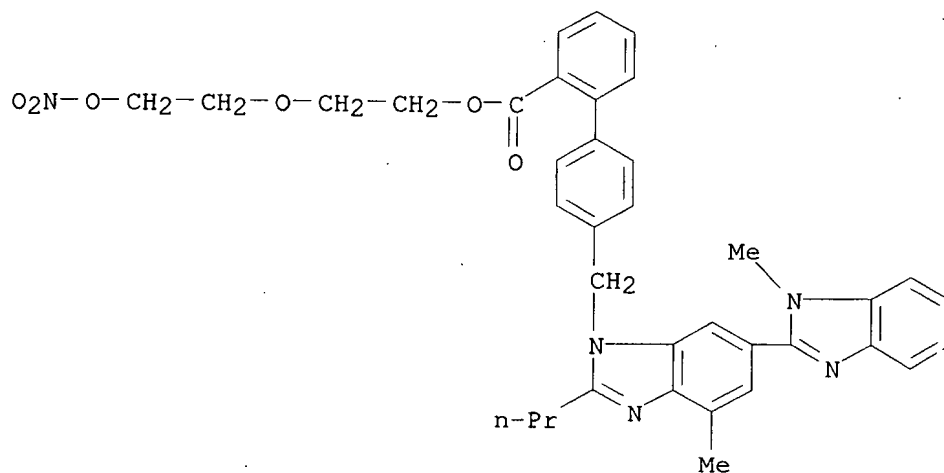
CN 1H-Benzimidazole-7-carboxylic acid, 2-ethoxy-1-[[2'-(1H-tetrazol-5-yl)[1,1'-biphenyl]-4-yl]methyl]-, 2-[[2-(nitrooxy)ethyl]thio]ethyl ester (9CI) (CA INDEX NAME)



RN 838877-74-0 HCAPLUS

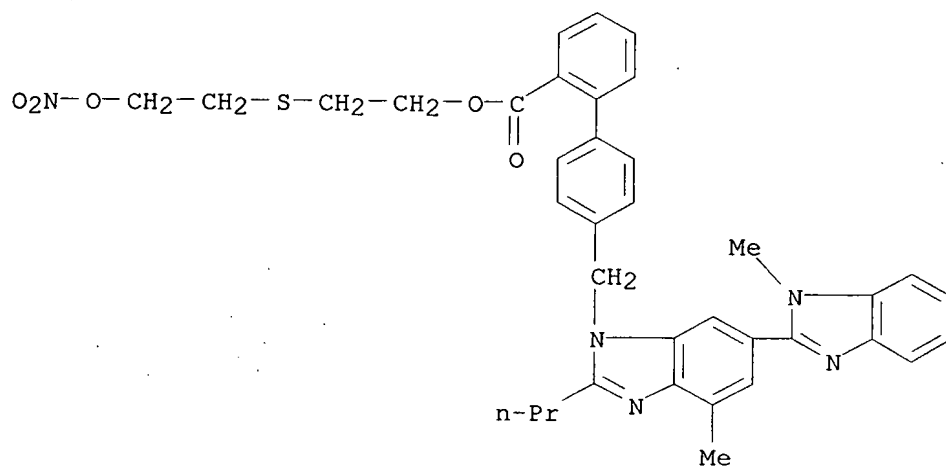
CN [1,1'-Biphenyl]-2-carboxylic acid, 4'--[(1,4'-dimethyl-2'-propyl[2,6'-bi-1H-benzimidazol]-1'-yl)methyl]-, 2-[2-(nitrooxy)ethoxy]ethyl ester (9CI) (CA INDEX NAME)





RN 838877-77-3 HCAPLUS

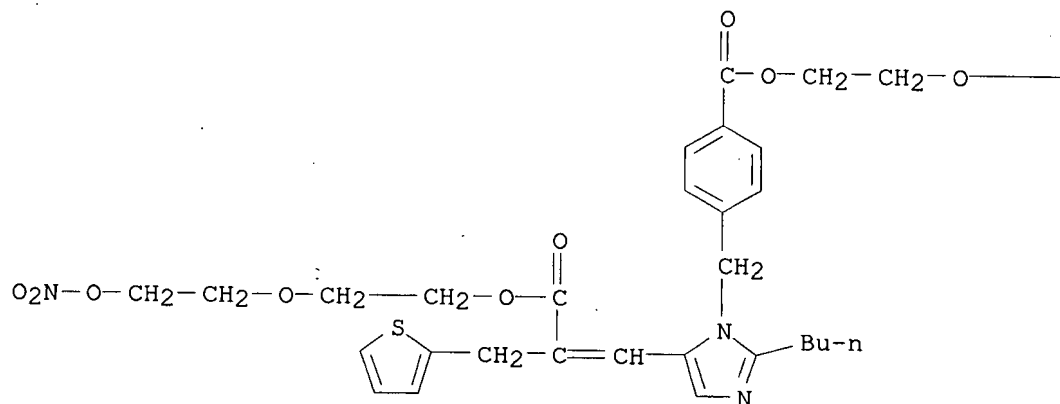
CN [1,1'-Biphenyl]-2-carboxylic acid, 4'-[(1,4'-dimethyl-2'-propyl[2,6'-bi-1H-benzimidazol]-1'-yl)methyl]-, 2-[[2-(nitrooxy)ethyl]thio]ethyl ester (9CI)  
(CA INDEX NAME)



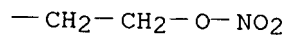
RN 838878-05-0 HCAPLUS

CN 2-Thiophenepropanoic acid, α-[[2-butyl-1-[[4-[[2-[2-(nitrooxy)ethoxy]ethoxy]carbonyl]phenyl]methyl]-1H-imidazol-5-yl]methylene]-, mono[2-[2-(nitrooxy)ethoxy]ethyl] ester (9CI) (CA INDEX NAME)

PAGE 1-A



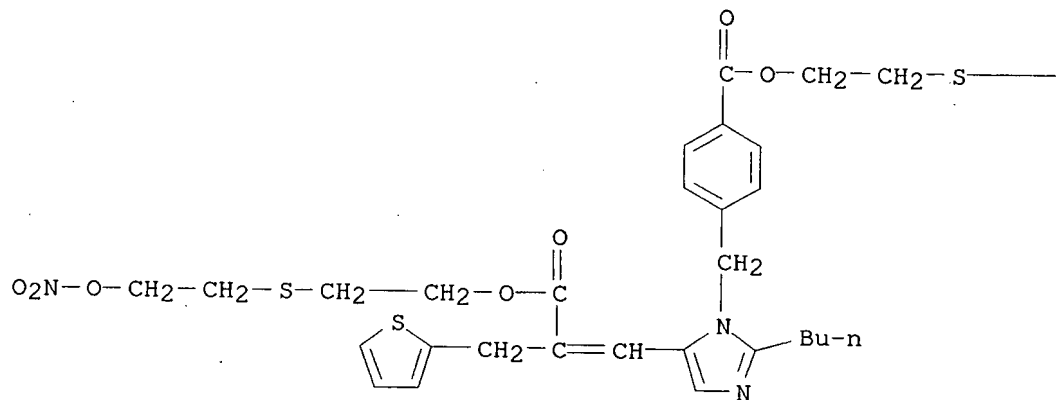
PAGE 1-B



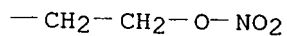
RN 838878-07-2 HCAPLUS

CN 2-Thiophenepropanoic acid,  $\alpha$ -[[2-butyl-1-[[4-[[2-[[2-(nitrooxy)ethyl]thio]ethoxy]carbonyl]phenyl]methyl]-1H-imidazol-5-yl]methylene]-, mono[2-[[2-(nitrooxy)ethyl]thio]ethyl] ester (9CI) (CA INDEX NAME)

PAGE 1-A



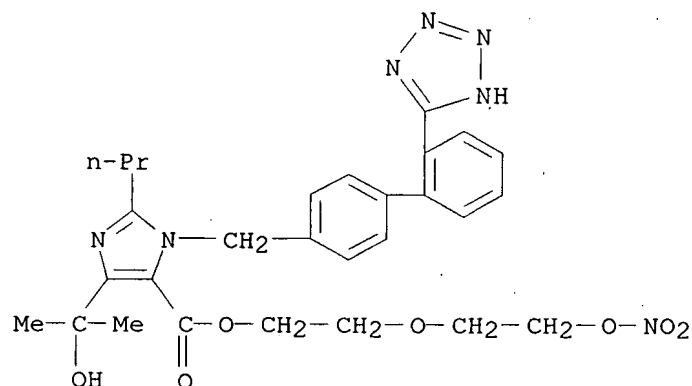
PAGE 1-B



10/522986 NITROOXYALKYL SUBTD ESTERS

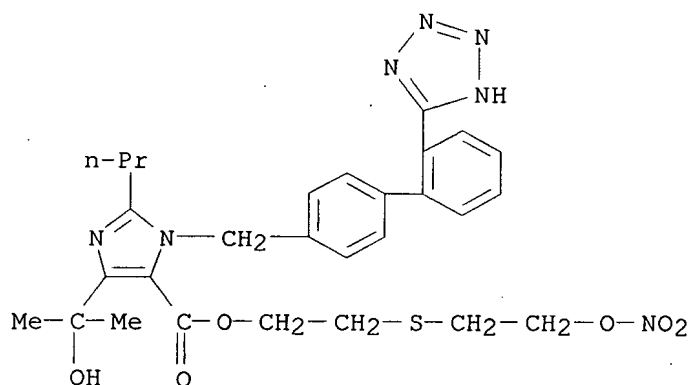
RN 838878-41-4 HCAPLUS

CN 1H-Imidazole-5-carboxylic acid, 4-(1-hydroxy-1-methylethyl)-2-propyl-1-  
[[2'-(1H-tetrazol-5-yl)[1,1'-biphenyl]-4-yl]methyl]-, 2-[2-  
(nitrooxy)ethoxy]ethyl ester (9CI) (CA INDEX NAME)



RN 838878-43-6 HCAPLUS

CN 1H-Imidazole-5-carboxylic acid, 4-(1-hydroxy-1-methylethyl)-2-propyl-1-  
[[2'-(1H-tetrazol-5-yl)[1,1'-biphenyl]-4-yl]methyl]-, 2-[[2-  
(nitrooxy)ethyl]thio]ethyl ester (9CI) (CA INDEX NAME)



L13 ANSWER 18 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN

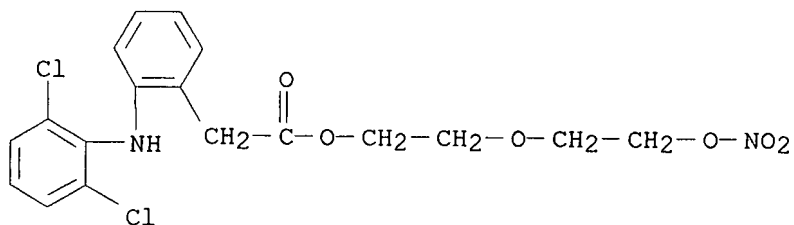
IT 174454-43-4

RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES  
(Uses)

(porous particle compns. comprising NO-donating diclofenac derivative)

RN 174454-43-4 HCAPLUS

CN Benzeneacetic acid, 2-[(2,6-dichlorophenyl)amino]-, 2-[2-  
(nitrooxy)ethoxy]ethyl ester (CA INDEX NAME)



L13 ANSWER 19 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN

IT 811787-89-0P 811787-90-3P 811787-91-4P

811787-92-5P 811787-93-6P

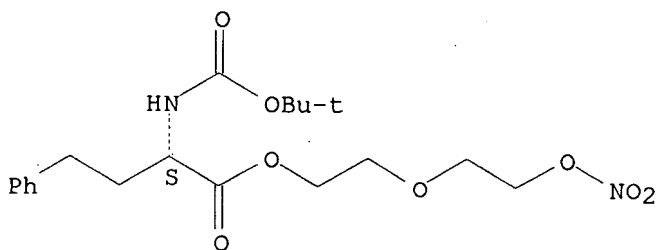
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(enalapril-nitroxy derivs. and related compound as ACE inhibitors for the treatment of cardiovascular and renal diseases)

RN 811787-89-0 HCAPLUS

CN Benzenebutanoic acid,  $\alpha$ -[[[1,1-dimethylethoxy)carbonyl]amino]-, 2-[2-(nitrooxy)ethoxy]ethyl ester, ( $\alpha$ S)- (9CI) (CA INDEX NAME)

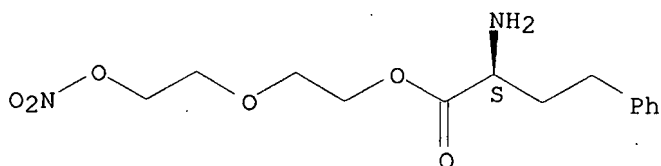
Absolute stereochemistry.



RN 811787-90-3 HCAPLUS

CN Benzenebutanoic acid,  $\alpha$ -amino-, 2-[2-(nitrooxy)ethoxy]ethyl ester, monohydrochloride, ( $\alpha$ S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

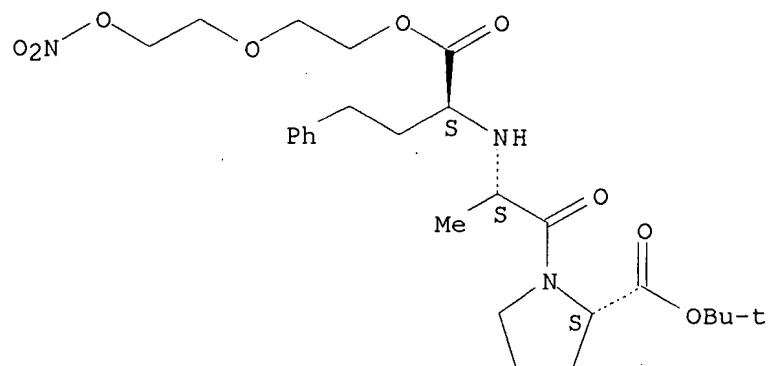


● HCl

RN 811787-91-4 HCAPLUS

CN L-Proline, N-[(1S)-1-[[2-[2-(nitrooxy)ethoxy]ethoxy]carbonyl]-3-phenylpropyl]-L-alanyl-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 811787-92-5 HCAPLUS

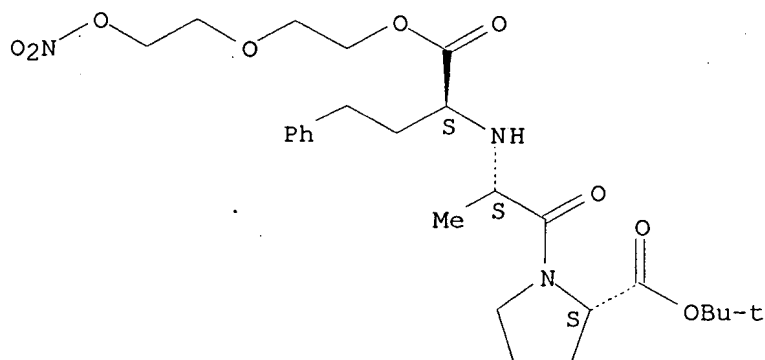
CN L-Proline, N-[(1S)-1-[[2-[2-(nitrooxy)ethoxy]ethoxy]carbonyl]-3-phenylpropyl]-L-alanyl-, 1,1-dimethylethyl ester, (2Z)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 811787-91-4

CMF C26 H39 N3 O9

Absolute stereochemistry.

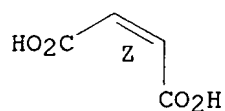


CM 2

CRN 110-16-7

CMF C4 H4 O4

Double bond geometry as shown.

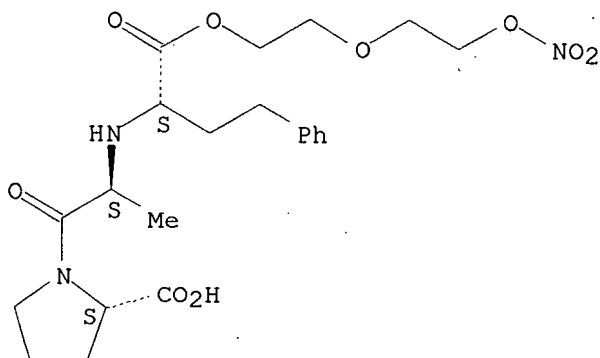


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RN 811787-93-6 HCAPLUS

CN L-Proline, N-[(1S)-1-[[2-[2-(nitrooxy)ethoxy]ethoxy]carbonyl]-3-phenylpropyl]-L-alanyl-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.



● HCl

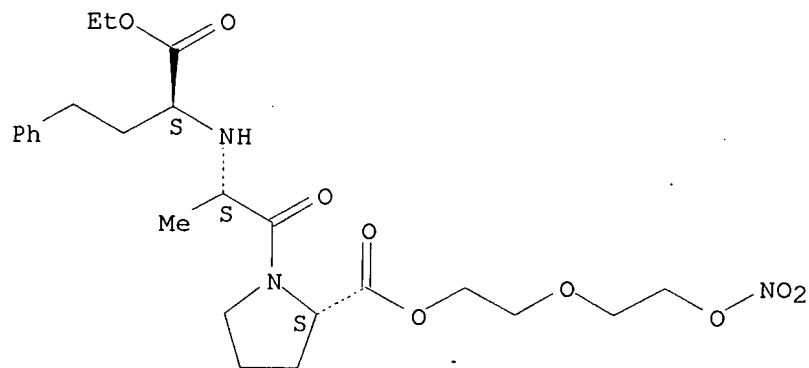
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 812681-96-2 812681-97-3 812682-01-2  
 812682-02-3 812682-06-7 812682-07-8  
 812682-11-4

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (enalapril-nitroxy derivs. and related compound as ACE inhibitors for the  
 treatment of cardiovascular and renal diseases)

RN 811786-20-6 HCAPLUS

CN L-Proline, N-[(1S)-1-(ethoxycarbonyl)-3-phenylpropyl]-L-alanyl-,  
 2-[2-(nitrooxy)ethoxy]ethyl ester (9CI) (CA INDEX NAME)

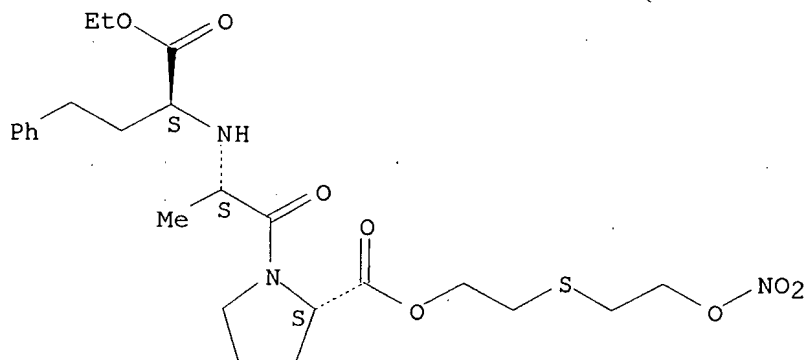
Absolute stereochemistry:



RN 811786-21-7 HCAPLUS

CN L-Proline, N-[(1S)-1-(ethoxycarbonyl)-3-phenylpropyl]-L-alanyl-,  
2-[[2-(nitrooxy)ethyl]thio]ethyl ester (9CI) (CA INDEX NAME)

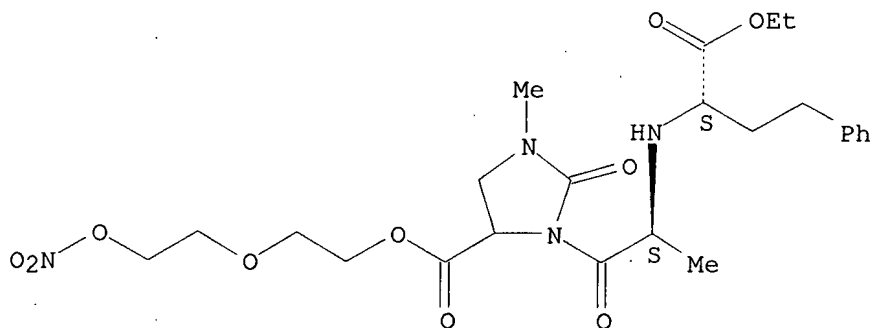
Absolute stereochemistry.



RN 811786-25-1 HCAPLUS

CN 4-Imidazolidinecarboxylic acid, 3-[(2S)-2-[[[(1S)-1-(ethoxycarbonyl)-3-phenylpropyl]amino]-1-oxopropyl]-1-methyl-2-oxo-, 2-[2-(nitrooxy)ethoxy]ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

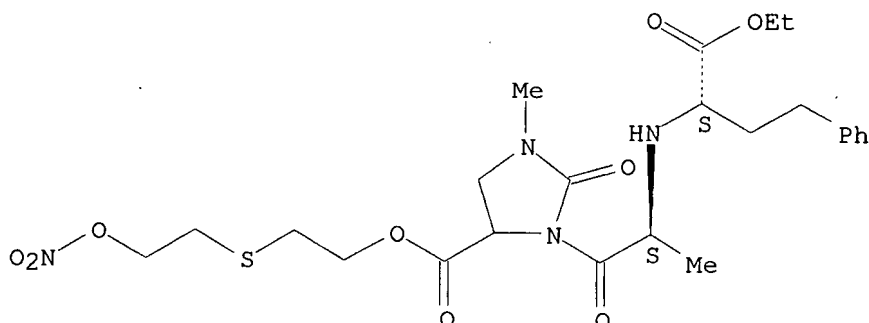


RN 811786-26-2 HCAPLUS

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CN 4-Imidazolidinecarboxylic acid, 3-[(2S)-2-[[[(1S)-1-(ethoxycarbonyl)-3-phenylpropyl]amino]-1-oxopropyl]-1-methyl-2-oxo-, 2-[[2-(nitrooxy)ethyl]thio]ethyl ester (9CI) (CA INDEX NAME)

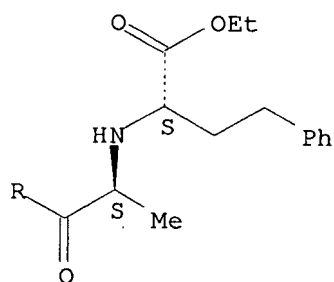
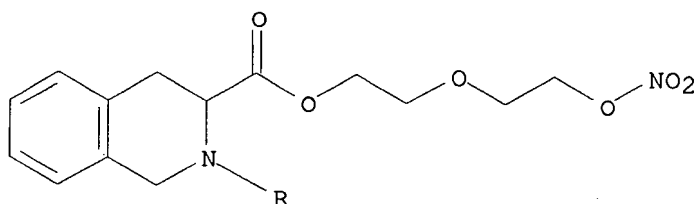
Absolute stereochemistry.



RN 811786-30-8 HCAPLUS

CN 3-Isoquinolinecarboxylic acid, 2-[(2S)-2-[[[(1S)-1-(ethoxycarbonyl)-3-phenylpropyl]amino]-1-oxopropyl]-1,2,3,4-tetrahydro-, 2-[[2-(nitrooxy)ethoxy]ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

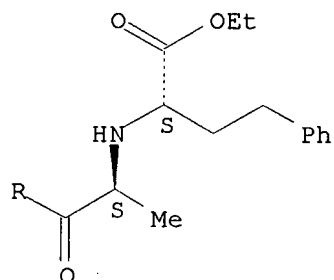
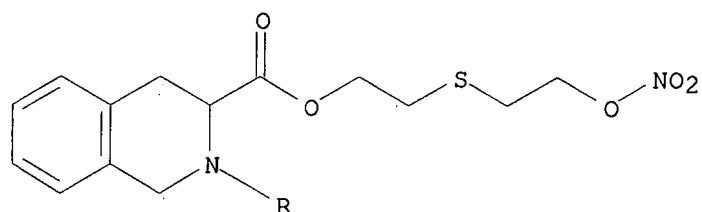


RN 811786-32-0 HCAPLUS

CN 3-Isoquinolinecarboxylic acid, 2-[(2S)-2-[[[(1S)-1-(ethoxycarbonyl)-3-phenylpropyl]amino]-1-oxopropyl]-1,2,3,4-tetrahydro-, 2-[[2-(nitrooxy)ethyl]thio]ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

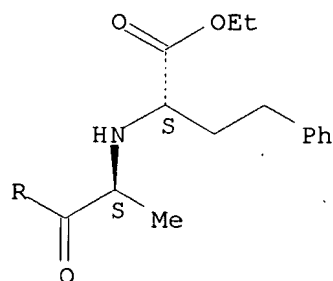
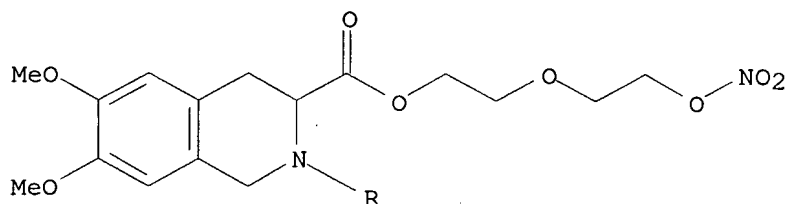




RN 811786-40-0 HCAPLUS

CN 3-Isoquinolinecarboxylic acid, 2-[(2S)-2-[[[(1S)-1-(ethoxycarbonyl)-3-phenylpropyl]amino]-1-oxopropyl]-1,2,3,4-tetrahydro-6,7-dimethoxy-, 2-[2-(nitrooxy)ethoxy]ethyl ester (9CI) (CA INDEX NAME)

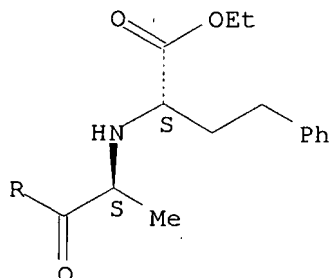
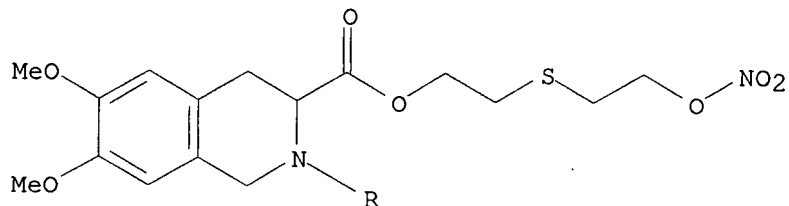
Absolute stereochemistry.



RN 811786-41-1 HCAPLUS

CN 3-Isoquinolinecarboxylic acid, 2-[(2S)-2-[[[(1S)-1-(ethoxycarbonyl)-3-phenylpropyl]amino]-1-oxopropyl]-1,2,3,4-tetrahydro-6,7-dimethoxy-, 2-[[2-(nitrooxy)ethyl]thio]ethyl ester (9CI) (CA INDEX NAME)

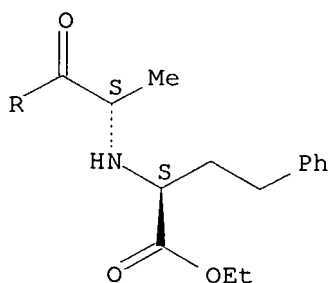
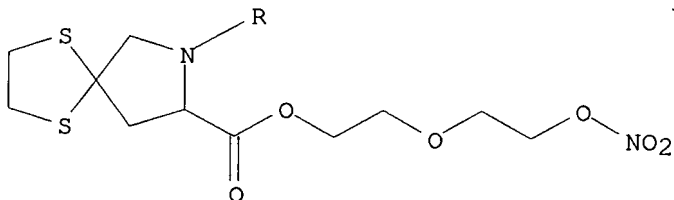
Absolute stereochemistry.



RN 811786-46-6 HCAPLUS

CN 1,4-Dithia-7-azaspiro[4.4]nonane-8-carboxylic acid, 7-[(2S)-2-[[[(1S)-1-(ethoxycarbonyl)-3-phenylpropyl]amino]-1-oxopropyl]-, 2-[2-(nitrooxy)ethoxy]ethyl ester (9CI) (CA INDEX NAME)

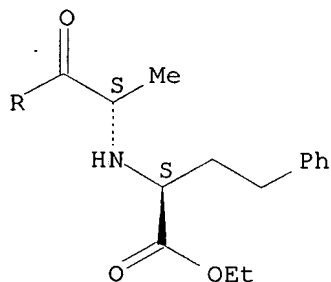
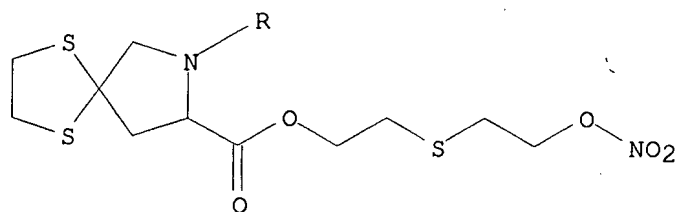
Absolute stereochemistry.



RN 811786-47-7 HCAPLUS

CN 1,4-Dithia-7-azaspiro[4.4]nonane-8-carboxylic acid, 7-[(2S)-2-[[[(1S)-1-(ethoxycarbonyl)-3-phenylpropyl]amino]-1-oxopropyl]-, 2-[[2-(nitrooxy)ethyl]thio]ethyl ester (9CI) (CA INDEX NAME)

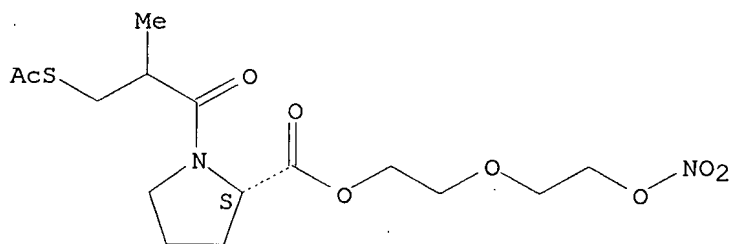
Absolute stereochemistry.



RN 811786-48-8 HCAPLUS

CN L-Proline, 1-[3-(acetylthio)-2-methyl-1-oxopropyl]-, 2-[2-(nitrooxy)ethoxy]ethyl ester (9CI) (CA INDEX NAME)

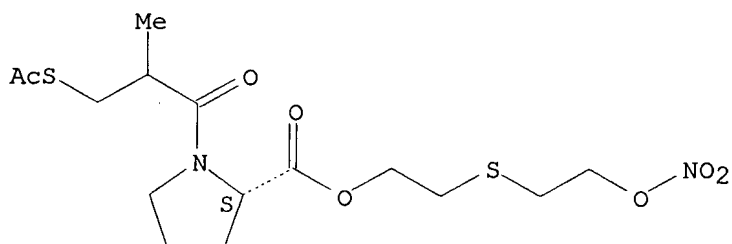
Absolute stereochemistry.



RN 811786-49-9 HCAPLUS

CN L-Proline, 1-[3-(acetylthio)-2-methyl-1-oxopropyl]-, 2-[[2-(nitrooxy)ethyl]thio]ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



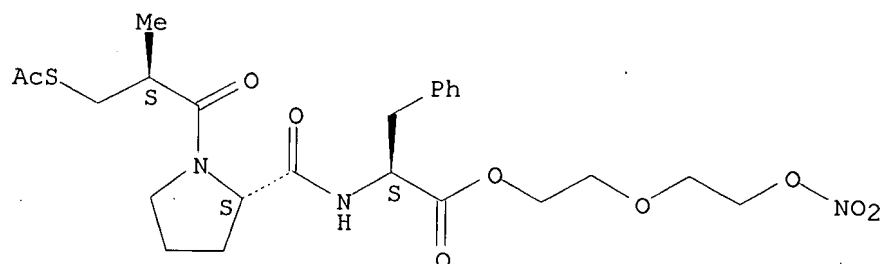
RN 811786-50-2 HCAPLUS

CN L-Phenylalanine, 1-[(2S)-3-(acetylthio)-2-methyl-1-oxopropyl]-L-prolyl-,

10/522986 NITROOXYALKYL SUBTD ESTERS

2-[2-(nitrooxy)ethoxy]ethyl ester (9CI) (CA INDEX NAME)

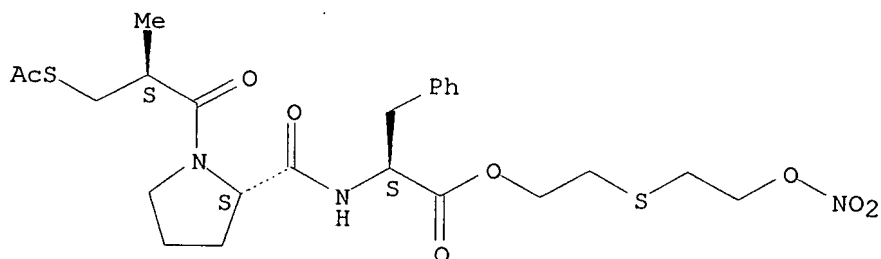
Absolute stereochemistry.



RN 811786-51-3 HCAPLUS

CN L-Phenylalanine, 1-[(2S)-3-(acetylthio)-2-methyl-1-oxopropyl]-L-prolyl-, 2-[[2-(nitrooxy)ethyl]thio]ethyl ester (9CI) (CA INDEX NAME)

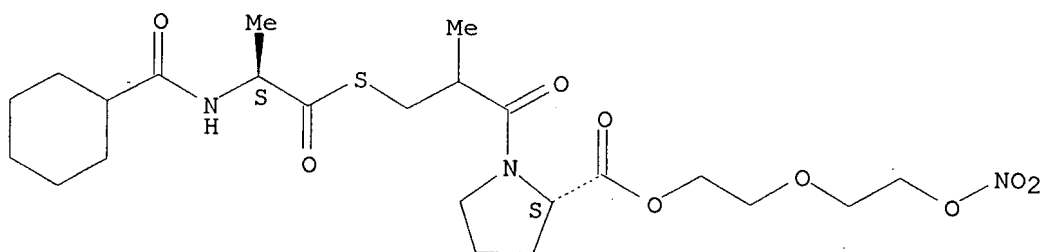
Absolute stereochemistry.



RN 811786-55-7 HCAPLUS

CN L-Proline, N-(cyclohexylcarbonyl)-L-alanyl-3-mercapto-2-methylpropanoyl-, 2-[2-(nitrooxy)ethoxy]ethyl ester (9CI) (CA INDEX NAME)

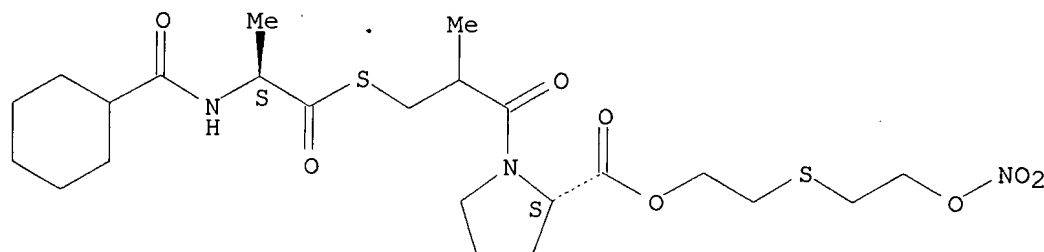
Absolute stereochemistry.



RN 811786-56-8 HCAPLUS

CN L-Proline, N-(cyclohexylcarbonyl)-L-alanyl-3-mercapto-2-methylpropanoyl-, 2-[[2-(nitrooxy)ethyl]thio]ethyl ester (9CI) (CA INDEX NAME)

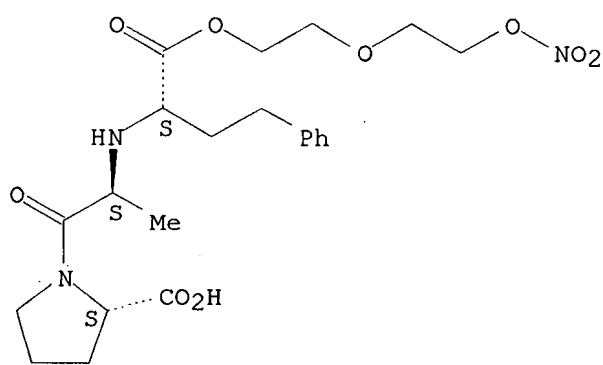
Absolute stereochemistry.



RN 811786-60-4 HCAPLUS

CN L-Proline, N-[(1S)-1-[[2-[2-(nitrooxy)ethoxy]ethoxy]carbonyl]-3-phenylpropyl]-L-alanyl- (9CI) (CA INDEX NAME)

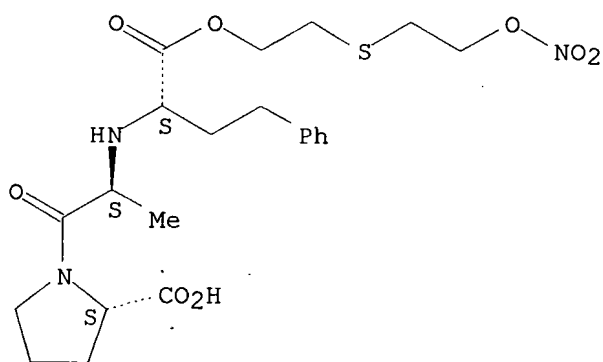
Absolute stereochemistry.



RN 811786-61-5 HCAPLUS

CN L-Proline, N-[(1S)-1-[[2-[2-(nitrooxy)ethyl]thio]ethoxy]carbonyl]-3-phenylpropyl]-L-alanyl- (9CI) (CA INDEX NAME)

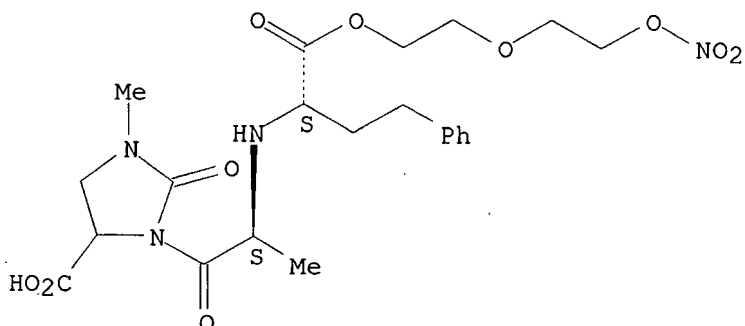
Absolute stereochemistry.



RN 811786-65-9 HCAPLUS

CN 4-Imidazolidinecarboxylic acid, 1-methyl-3-[(2S)-2-[[[(1S)-1-[[2-[2-(nitrooxy)ethoxy]ethoxy]carbonyl]-3-phenylpropyl]amino]-1-oxopropyl]-2-oxo- (9CI) (CA INDEX NAME)

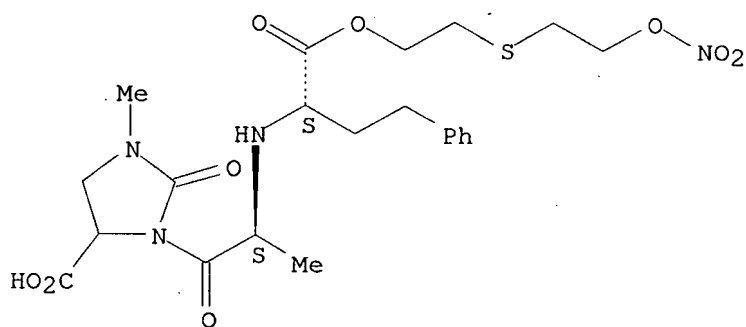
Absolute stereochemistry.



RN 811786-66-0 HCAPLUS

CN 4-Imidazolidinecarboxylic acid, 1-methyl-3-[(2S)-2-[[[(1S)-1-[[2-[[2-(nitrooxy)ethyl]thio]ethoxy]carbonyl]-3-phenylpropyl]amino]-1-oxopropyl]-2-oxo- (9CI) (CA INDEX NAME)

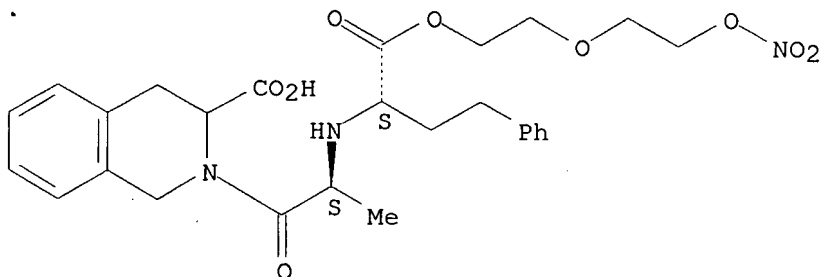
Absolute stereochemistry.



RN 811786-70-6 HCAPLUS

CN 3-Isoquinolinecarboxylic acid, 1,2,3,4-tetrahydro-2-[(2S)-2-[[[(1S)-1-[[2-[[2-(nitrooxy)ethoxy]ethoxy]carbonyl]-3-phenylpropyl]amino]-1-oxopropyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

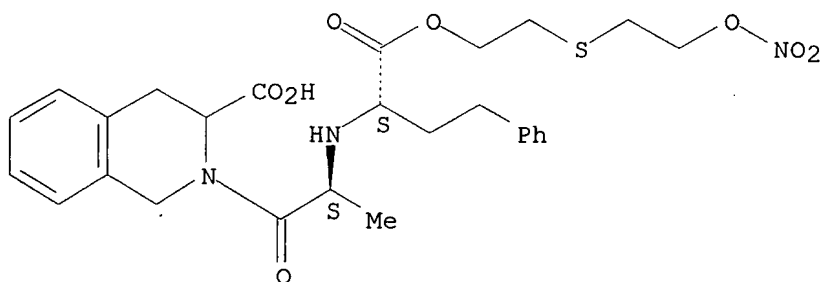


RN 811786-71-7 HCAPLUS

CN 3-Isoquinolinecarboxylic acid, 1,2,3,4-tetrahydro-2-[(2S)-2-[[[(1S)-1-[[2-

[[2-(nitrooxy)ethyl]thio]ethoxy]carbonyl]-3-phenylpropyl]amino]-1-oxopropyl]- (9CI) (CA INDEX NAME)

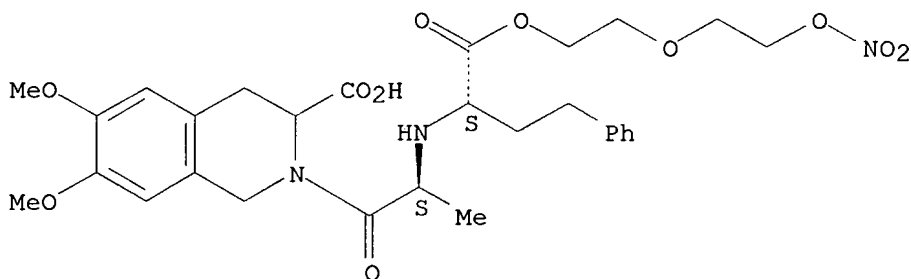
Absolute stereochemistry.



RN 811786-75-1 HCAPLUS

CN 3-Isoquinolinecarboxylic acid, 1,2,3,4-tetrahydro-6,7-dimethoxy-2-[(2S)-2-[(1S)-1-[[2-[2-(nitrooxy)ethoxy]ethoxy]carbonyl]-3-phenylpropyl]amino]-1-oxopropyl]- (9CI) (CA INDEX NAME)

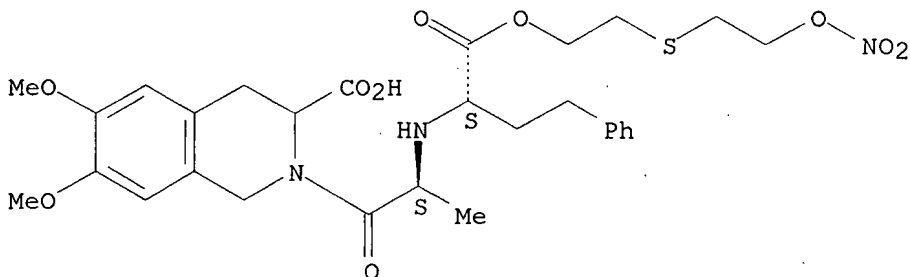
Absolute stereochemistry.



RN 811786-76-2 HCAPLUS

CN 3-Isoquinolinecarboxylic acid, 1,2,3,4-tetrahydro-6,7-dimethoxy-2-[(2S)-2-[(1S)-1-[[2-[2-(nitrooxy)ethyl]thio]ethoxy]carbonyl]-3-phenylpropyl]amino]-1-oxopropyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

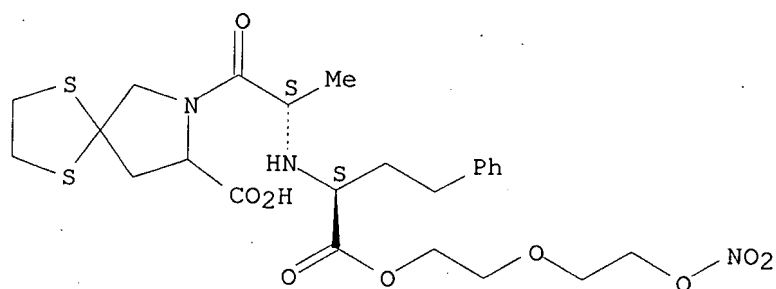


RN 811786-80-8 HCAPLUS

CN 1,4-Dithia-7-azaspiro[4.4]nonane-8-carboxylic acid, 7-[(2S)-2-[(1S)-1-[[2-

[2-(nitrooxy)ethoxy]ethoxy]carbonyl]-3-phenylpropyl]amino]-1-oxopropyl]-  
(9CI) (CA INDEX NAME)

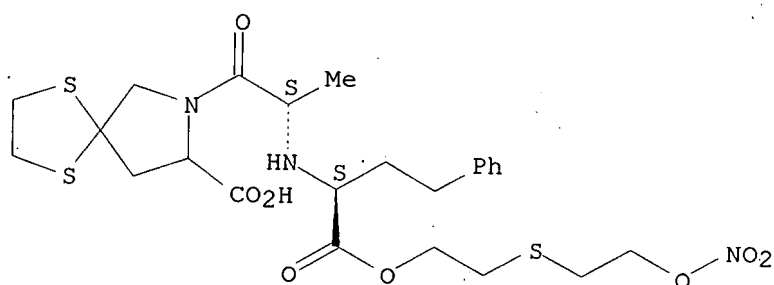
Absolute stereochemistry.



RN 811786-81-9 HCAPLUS

CN 1,4-Dithia-7-azaspiro[4.4]nonane-8-carboxylic acid, 7-[(2S)-2-[[[(1S)-1-[[2-  
[[2-(nitrooxy)ethyl]thio]ethoxy]carbonyl]-3-phenylpropyl]amino]-1-  
oxopropyl]- (9CI) (CA INDEX NAME)

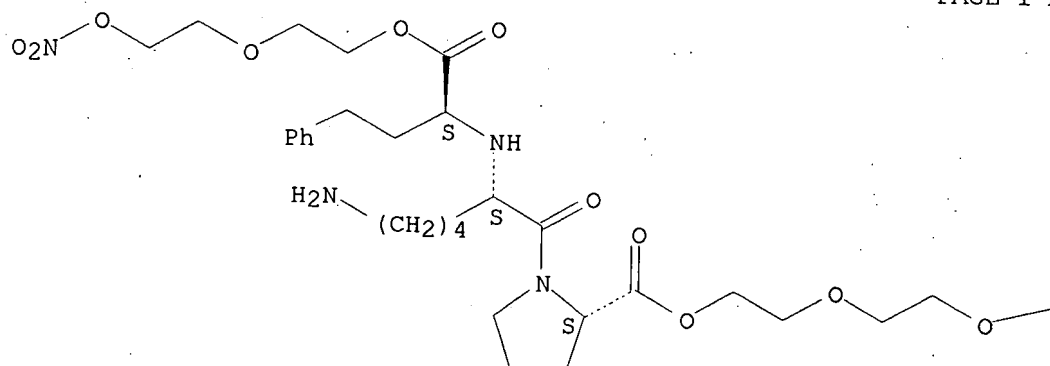
Absolute stereochemistry.



RN 811786-86-4 HCAPLUS

CN L-Proline, N2-[(1S)-1-[[2-[2-(nitrooxy)ethoxy]ethoxy]carbonyl]-3-  
phenylpropyl]-L-lysyl-, 2-[2-(nitrooxy)ethoxy]ethyl ester (9CI) (CA INDEX  
NAME)

Absolute stereochemistry.



PAGE 1-A



PAGE 1-B

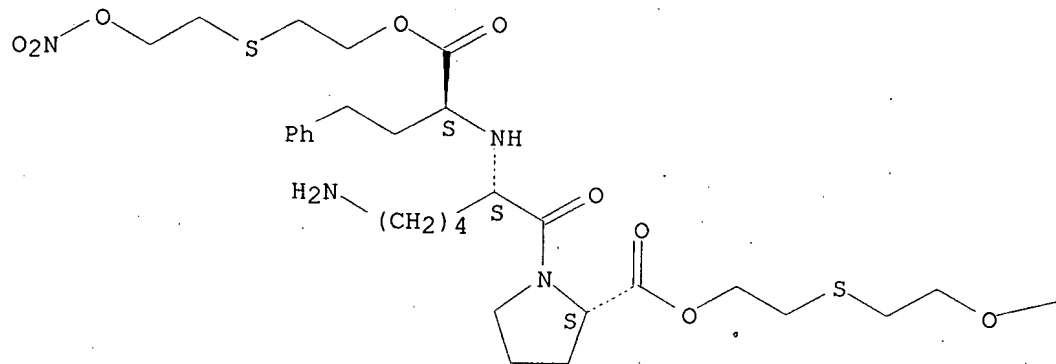
—NO<sub>2</sub>

RN 811786-87-5 HCAPLUS

CN L-Proline, N2-[(1S)-1-[[2-[[2-(nitrooxy)ethyl]thio]ethoxy]carbonyl]-3-phenylpropyl]-L-lysyl-, 2-[[2-(nitrooxy)ethyl]thio]ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

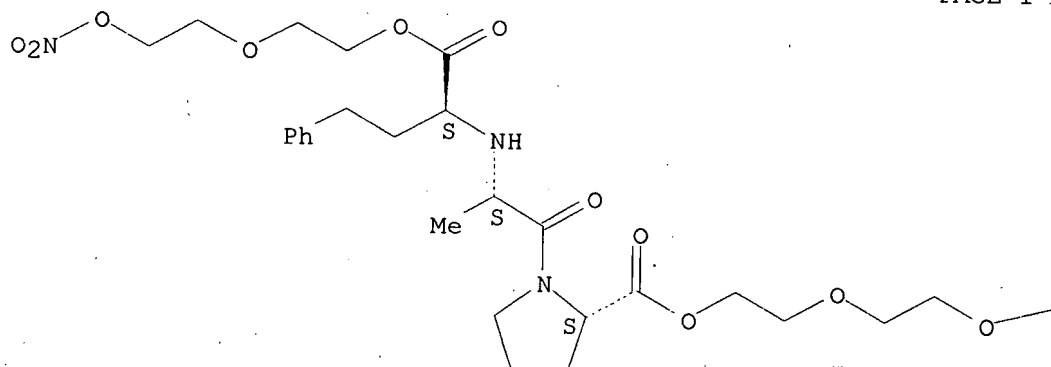
—NO<sub>2</sub>

RN 811786-91-1 HCAPLUS

CN L-Proline, N-[(1S)-1-[[2-[2-(nitrooxy)ethoxy]ethoxy]carbonyl]-3-phenylpropyl]-L-alanyl-, 2-[2-(nitrooxy)ethoxy]ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

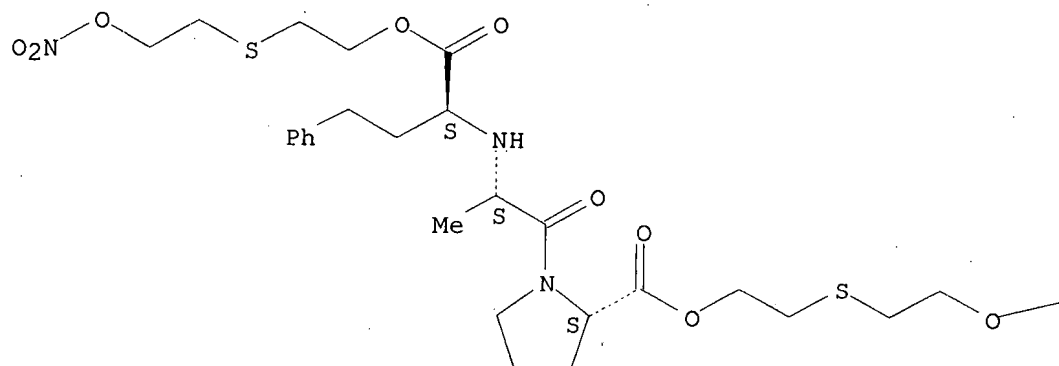
—NO<sub>2</sub>

RN 811786-92-2 HCAPLUS

CN L-Proline, N-[(1S)-1-[[2-[[2-(nitrooxy)ethyl]thio]ethoxy]carbonyl]-3-phenylpropyl]-L-alanyl-, 2-[[2-(nitrooxy)ethyl]thio]ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



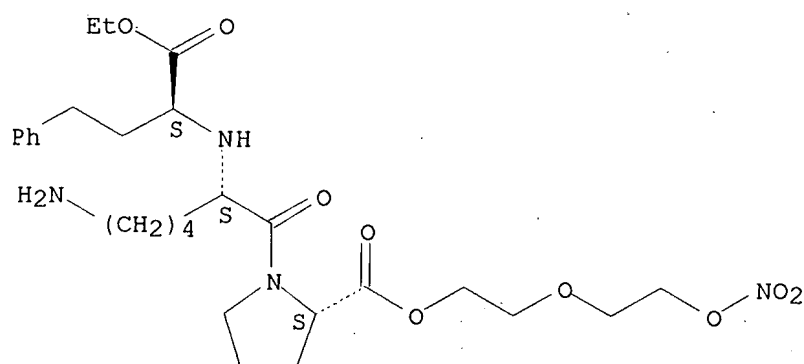
PAGE 1-B

-NO<sub>2</sub>

RN 811786-96-6 HCAPLUS

CN L-Proline, N2-[(1S)-1-(ethoxycarbonyl)-3-phenylpropyl]-L-lysyl-,  
2-[2-(nitrooxy)ethoxy]ethyl ester (9CI) (CA INDEX NAME)

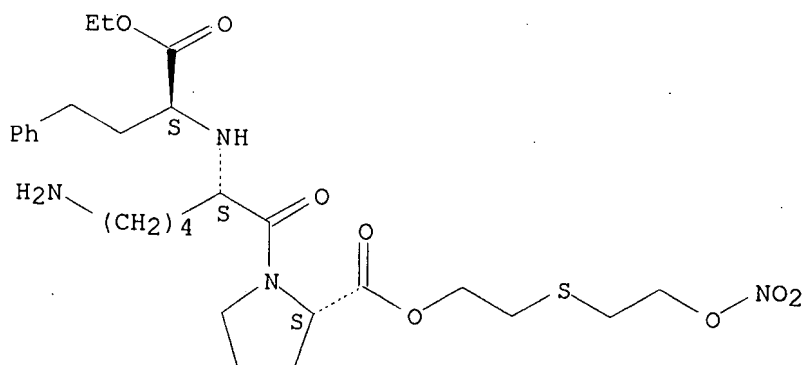
Absolute stereochemistry.



RN 811786-97-7 HCAPLUS

CN L-Proline, N2-[(1S)-1-(ethoxycarbonyl)-3-phenylpropyl]-L-lysyl-,  
2-[[2-(nitrooxy)ethyl]thio]ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

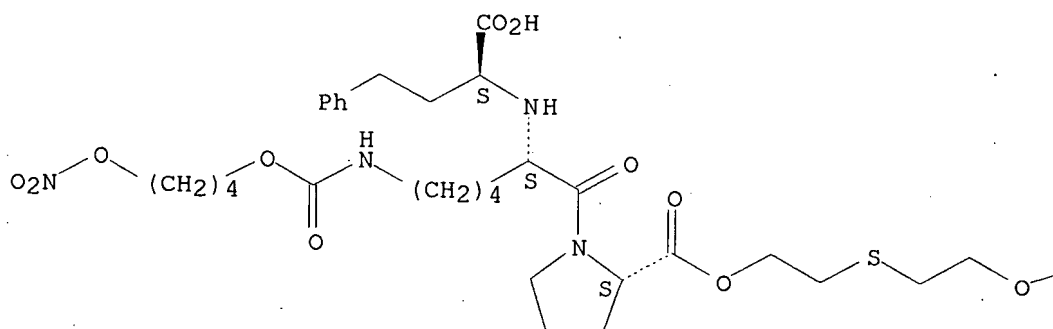


RN 811787-11-8 HCAPLUS

CN L-Proline, N2-[(1S)-1-carboxy-3-phenylpropyl]-N6-[[4-(nitrooxy)butoxy]carbonyl]-L-lysyl-, 2-[2-[[2-(nitrooxy)ethyl]thio]ethyl] ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

—NO2

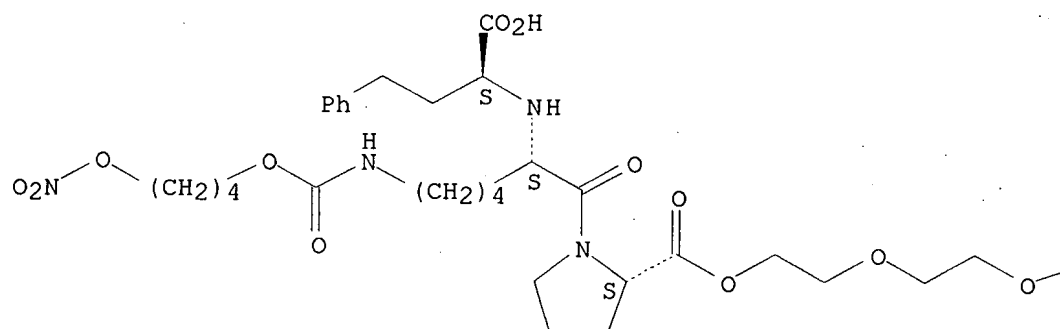
RN 811787-13-0 HCAPLUS

CN L-Proline, N2-[(1S)-1-carboxy-3-phenylpropyl]-N6-[[4-(nitrooxy)butoxy]carbonyl]-L-lysyl-, 2-[2-[[2-(nitrooxy)ethoxy]ethyl] ester

(9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

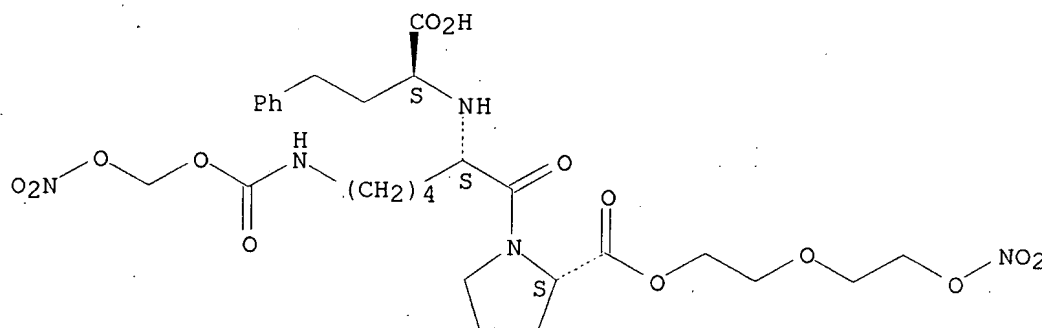


PAGE 1-B

—NO<sub>2</sub>

RN 811787-19-6 HCAPLUS  
 CN L-Proline, N2-[(1S)-1-carboxy-3-phenylpropyl]-N6-  
 [[(nitrooxy)methoxy]carbonyl]-L-lysyl-, 2-[2-[2-(nitrooxy)ethoxy]ethyl]  
 ester (9CI) (CA INDEX NAME)

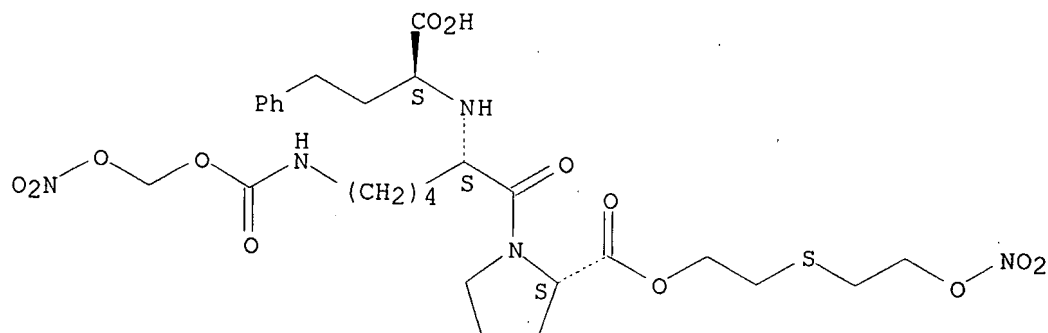
Absolute stereochemistry.



RN 811787-21-0 HCAPLUS  
 CN L-Proline, N2-[(1S)-1-carboxy-3-phenylpropyl]-N6-  
 [[(nitrooxy)methoxy]carbonyl]-L-lysyl-, 2-[2-[2-[2-

(nitrooxy)ethyl]thio]ethyl] ester (9CI) (CA INDEX NAME)

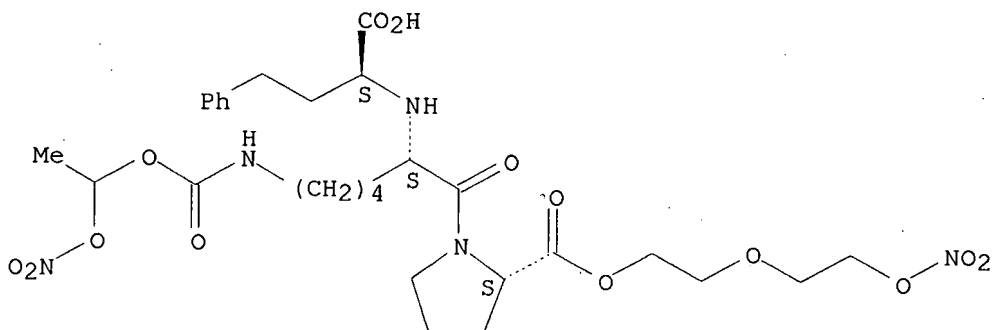
Absolute stereochemistry.



RN 811787-27-6 HCAPLUS

CN L-Proline, N2-[(1S)-1-carboxy-3-phenylpropyl]-N6-[[1-(nitrooxy)ethoxy]carbonyl]-L-lysyl-, 2-[2-[2-(nitrooxy)ethoxy]ethyl] ester (9CI) (CA INDEX NAME)

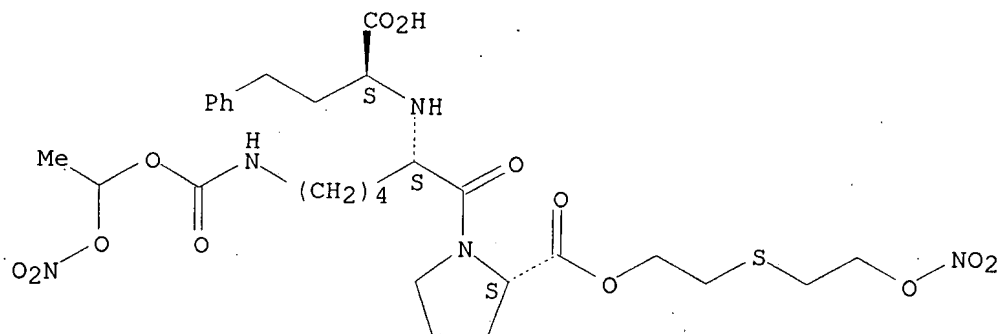
Absolute stereochemistry.



RN 811787-29-8 HCAPLUS

CN L-Proline, N2-[(1S)-1-carboxy-3-phenylpropyl]-N6-[[1-(nitrooxy)ethoxy]carbonyl]-L-lysyl-, 2-[2-[[2-(nitrooxy)ethyl]thio]ethyl] ester (9CI) (CA INDEX NAME)

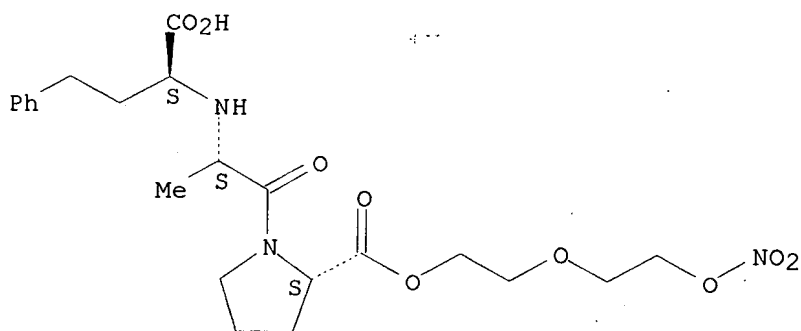
Absolute stereochemistry.



RN 811787-38-9 HCAPLUS

CN L-Proline, N-[(1S)-1-carboxy-3-phenylpropyl]-L-alanyl-,  
2-[2-[2-(nitrooxy)ethoxy]ethyl] ester (9CI) (CA INDEX NAME)

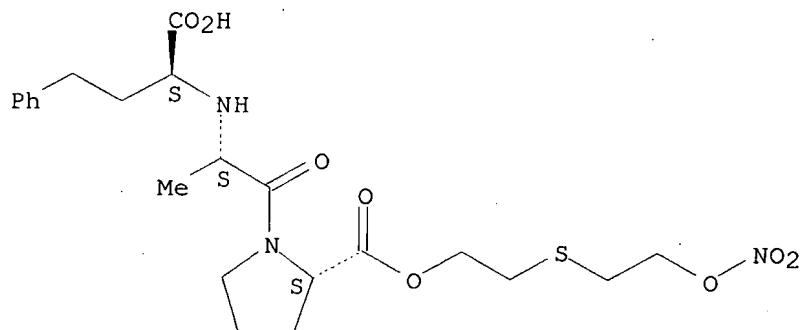
Absolute stereochemistry.



RN 811787-39-0 HCAPLUS

CN L-Proline, N-[(1S)-1-carboxy-3-phenylpropyl]-L-alanyl-,  
2-[2-[[2-(nitrooxy)ethyl]thio]ethyl] ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

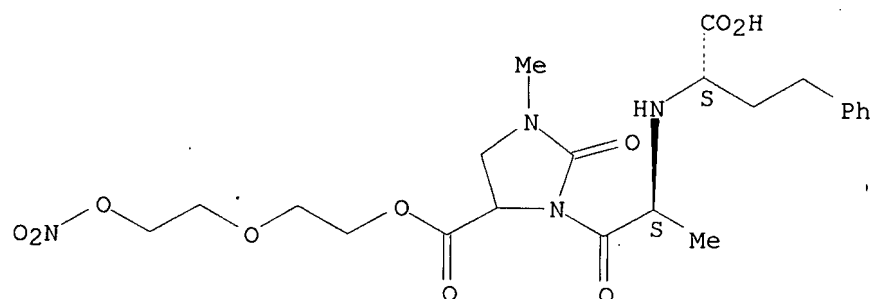


RN 811787-43-6 HCAPLUS

CN 4-Imidazolidinecarboxylic acid, 3-[(2S)-2-[[1-(1S)-1-carboxy-3-phenylpropyl]amino]-1-oxopropyl]-1-methyl-2-oxo-, 4-[2-[2-

(nitrooxy)ethoxy]ethyl] ester (9CI) (CA INDEX NAME)

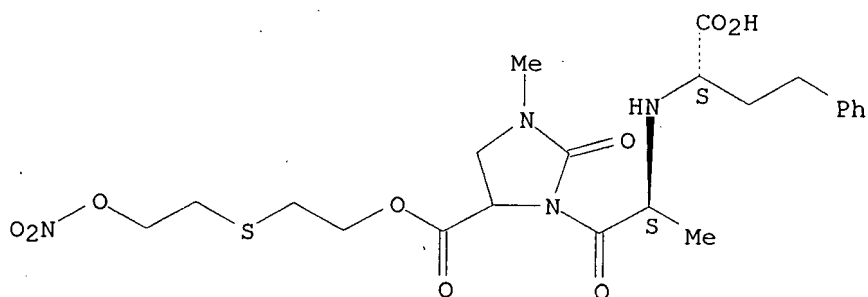
Absolute stereochemistry.



RN 811787-44-7 HCAPLUS

CN 4-Imidazolidinecarboxylic acid, 3-[(2S)-2-[[[(1S)-1-carboxy-3-phenylpropyl]amino]-1-oxopropyl]-1-methyl-2-oxo-, 4-[2-[[2-(nitrooxy)ethyl]thio]ethyl] ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

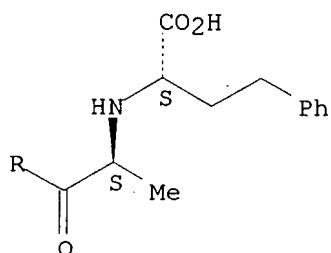
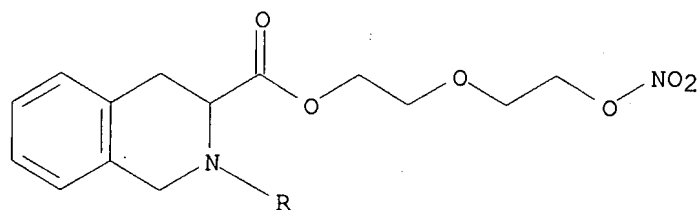


RN 811787-48-1 HCAPLUS

CN 3-Isoquinolinecarboxylic acid, 2-[(2S)-2-[[[(1S)-1-carboxy-3-phenylpropyl]amino]-1-oxopropyl]-1,2,3,4-tetrahydro-, 3-[2-[2-(nitrooxy)ethoxy]ethyl] ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

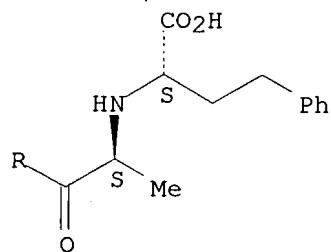
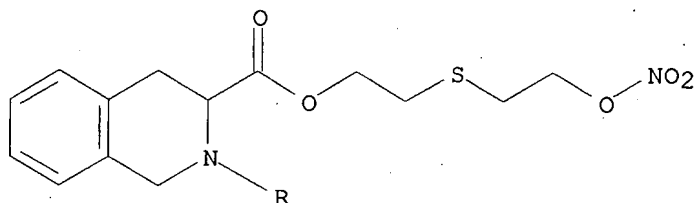




RN 811787-49-2 HCAPLUS

CN 3-Isoquinolinecarboxylic acid, 2-[(2S)-2-[[[(1S)-1-carboxy-3-phenylpropyl]amino]-1-oxopropyl]-1,2,3,4-tetrahydro-, 3-[2-[[2-(nitrooxy)ethyl]thio]ethyl] ester (9CI) (CA INDEX NAME)

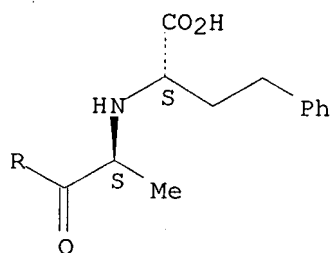
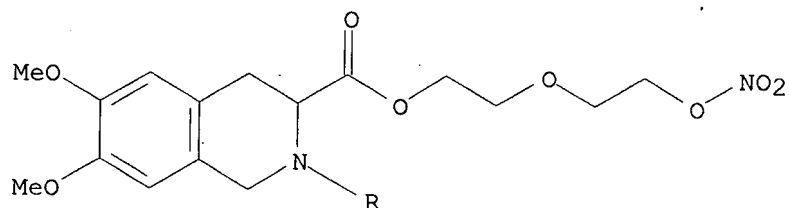
Absolute stereochemistry.



RN 811787-54-9 HCAPLUS

CN 3-Isoquinolinecarboxylic acid, 2-[(2S)-2-[[[(1S)-1-carboxy-3-phenylpropyl]amino]-1-oxopropyl]-1,2,3,4-tetrahydro-6,7-dimethoxy-, 3-[2-[2-(nitrooxy)ethoxy]ethyl] ester (9CI) (CA INDEX NAME)

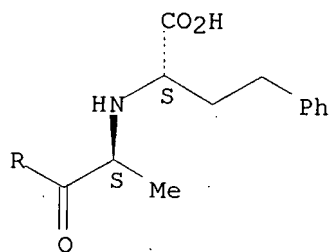
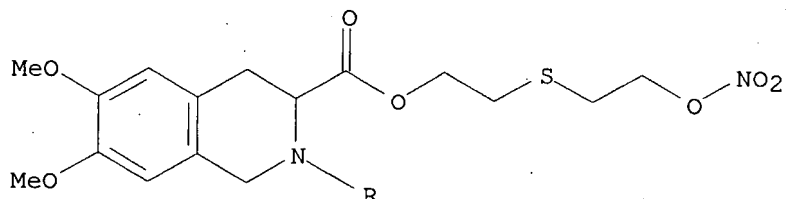
Absolute stereochemistry.



RN 811787-55-0 HCAPLUS

CN 3-Isoquinolinecarboxylic acid, 2-[(2S)-2-[[[(1S)-1-carboxy-3-phenylpropyl]amino]-1-oxopropyl]-1,2,3,4-tetrahydro-6,7-dimethoxy-, 3-[2-[[2-(nitrooxy)ethyl]thio]ethyl] ester (9CI) (CA INDEX NAME)

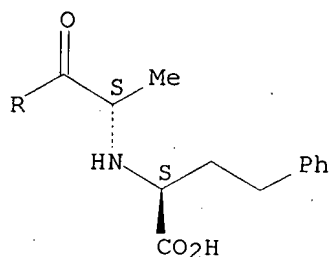
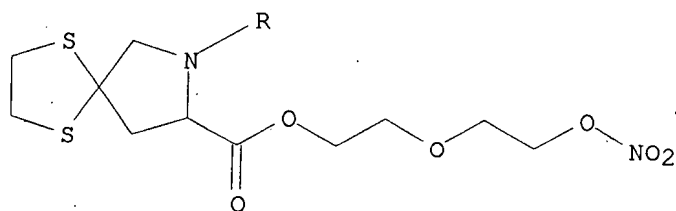
Absolute stereochemistry.



RN 811787-60-7 HCAPLUS

CN 1,4-Dithia-7-azaspiro[4.4]nonane-8-carboxylic acid, 7-[(2S)-2-[[[(1S)-1-carboxy-3-phenylpropyl]amino]-1-oxopropyl]-, 8-[2-[2-(nitrooxy)ethoxy]ethyl] ester (9CI) (CA INDEX NAME)

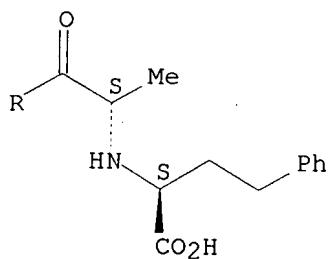
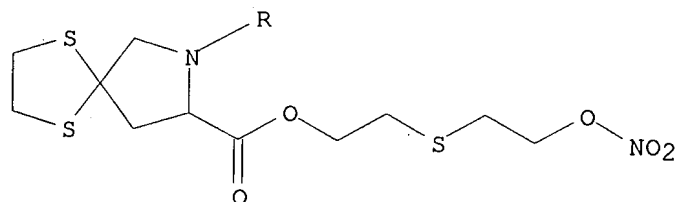
Absolute stereochemistry.



RN 811787-61-8 HCAPLUS

CN 1,4-Dithia-7-azaspiro[4.4]nonane-8-carboxylic acid, 7-[(2S)-2-[(1S)-1-carboxy-3-phenylpropyl]amino]-1-oxopropyl]-, 8-[2-[[2-(nitrooxy)ethyl]thio]ethyl] ester (9CI) (CA INDEX NAME)

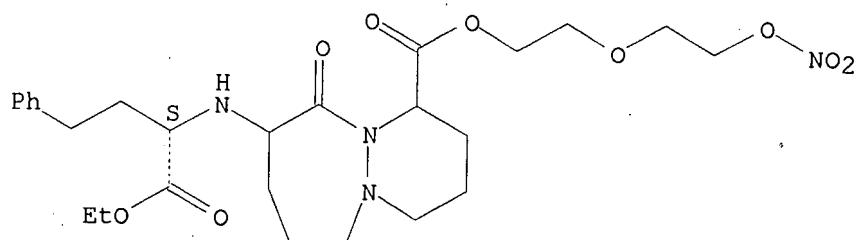
Absolute stereochemistry.



RN 811787-67-4 HCAPLUS

CN 6H-Pyridazino[1,2-a][1,2]diazepine-1-carboxylic acid, 9-[[[(1S)-1-(ethoxycarbonyl)-3-phenylpropyl]amino]octahydro-10-oxo-, 2-[2-(nitrooxy)ethoxy]ethyl ester (9CI) (CA INDEX NAME)

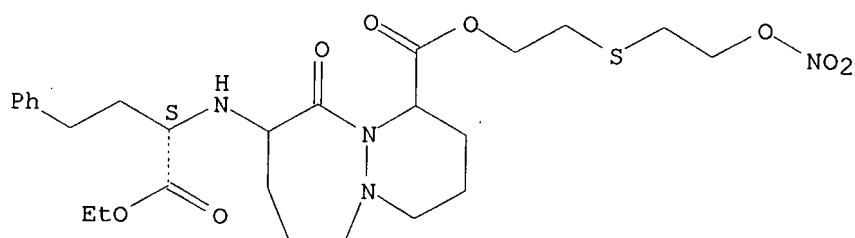
Absolute stereochemistry.



RN 811787-68-5 HCAPLUS

CN 6H-Pyridazino[1,2-a][1,2]diazepine-1-carboxylic acid, 9-[[[(1S)-1-(ethoxycarbonyl)-3-phenylpropyl]amino]octahydro-10-oxo-, 2-[[2-(nitrooxy)ethyl]thio]ethyl ester (9CI) (CA INDEX NAME)

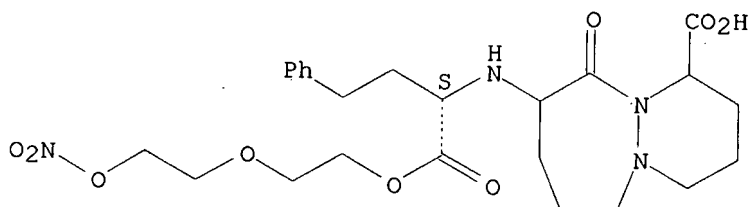
Absolute stereochemistry.



RN 811787-72-1 HCAPLUS

CN 6H-Pyridazino[1,2-a][1,2]diazepine-1-carboxylic acid, octahydro-9-[[[(1S)-1-[[2-[2-(nitrooxy)ethoxy]ethoxy]carbonyl]-3-phenylpropyl]amino]-10-oxo- (9CI) (CA INDEX NAME)

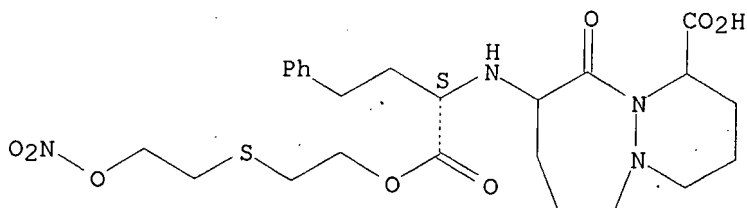
Absolute stereochemistry.



RN 811787-73-2 HCAPLUS

CN 6H-Pyridazino[1,2-a][1,2]diazepine-1-carboxylic acid, octahydro-9-[[[(1S)-1-[[2-[2-(nitrooxy)ethyl]thio]ethoxy]carbonyl]-3-phenylpropyl]amino]-10-oxo- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



10/522986 NITROOXYALKYL SUBTD ESTERS

RN 811787-74-3 HCAPLUS

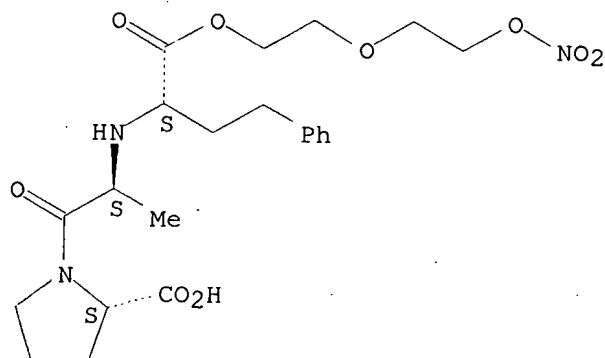
CN L-Proline, N-[(1S)-1-[[2-[2-(nitrooxy)ethoxy]ethoxy]carbonyl]-3-phenylpropyl]-L-alanyl-, (2Z)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 811786-60-4

CMF C22 H31 N3 O9

Absolute stereochemistry.

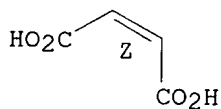


CM 2

CRN 110-16-7

CMF C4 H4 O4

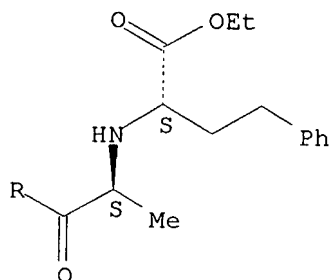
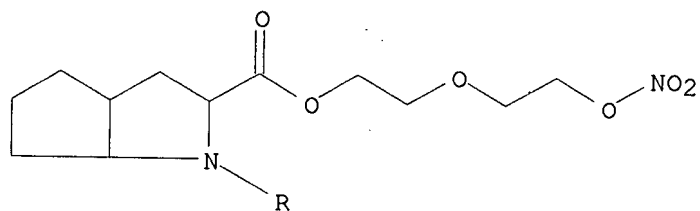
Double bond geometry as shown.



RN 812681-86-0 HCAPLUS

CN Cyclopenta[b]pyrrole-2-carboxylic acid, 1-[(2S)-2-[[[(1S)-1-(ethoxycarbonyl)-3-phenylpropyl]amino]-1-oxopropyl]octahydro-, 2-[2-(nitrooxy)ethoxy]ethyl ester (9CI) (CA INDEX NAME)

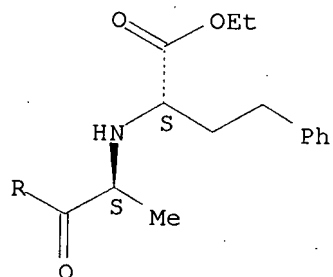
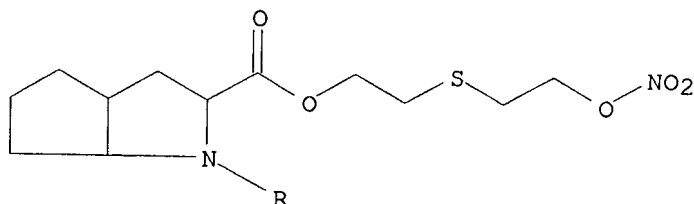
Absolute stereochemistry.



RN 812681-87-1 HCAPLUS

CN Cyclopenta[b]pyrrole-2-carboxylic acid, 1-[(2S)-2-[[[(1S)-1-(ethoxycarbonyl)-3-phenylpropyl]amino]-1-oxopropyl]octahydro-, 2-[[2-(nitrooxy)ethyl]thio]ethyl ester (9CI) (CA INDEX NAME)

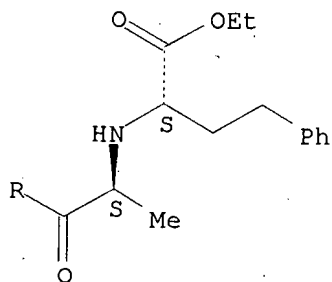
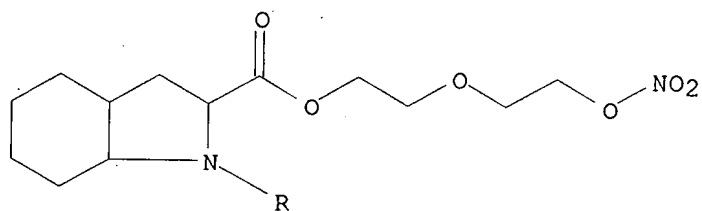
Absolute stereochemistry.



RN 812681-91-7 HCAPLUS

CN 1H-Indole-2-carboxylic acid, 1-[(2S)-2-[[[(1S)-1-(ethoxycarbonyl)-3-phenylpropyl]amino]-1-oxopropyl]octahydro-, 2-[2-(nitrooxy)ethoxy]ethyl ester (9CI) (CA INDEX NAME)

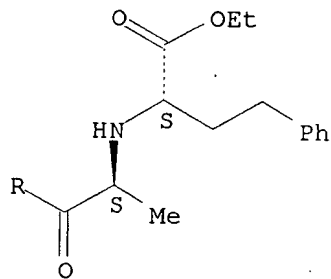
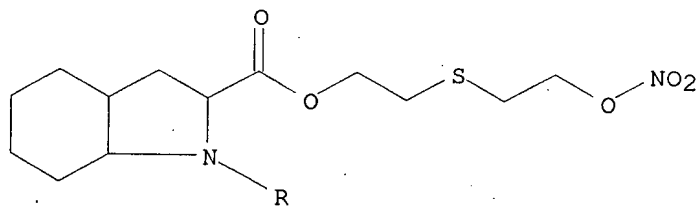
Absolute stereochemistry.



RN 812681-92-8 HCAPLUS

CN 1H-Indole-2-carboxylic acid, 1-[(2S)-2-[[[(1S)-1-(ethoxycarbonyl)-3-phenylpropyl]amino]-1-oxopropyl]octahydro-, 2-[[2-(nitrooxy)ethyl]thio]ethyl ester (9CI) (CA INDEX NAME)

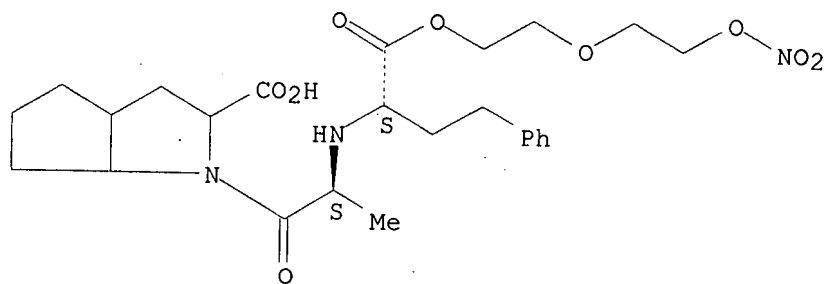
Absolute stereochemistry.



RN 812681-96-2 HCAPLUS

CN Cyclopenta[b]pyrrole-2-carboxylic acid, octahydro-1-[(2S)-2-[[[(1S)-1-[[2-[2-(nitrooxy)ethoxy]ethoxy]carbonyl]-3-phenylpropyl]amino]-1-oxopropyl]- (9CI) (CA INDEX NAME)

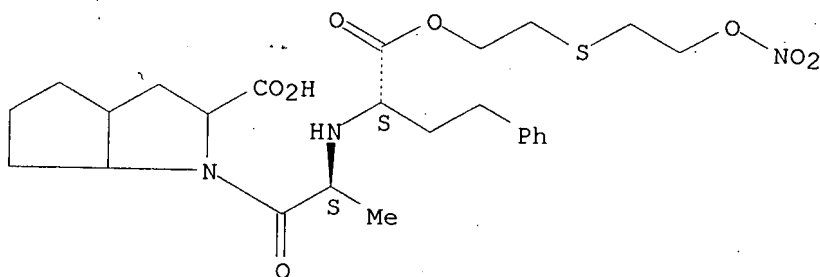
Absolute stereochemistry.



RN 812681-97-3 HCAPLUS

CN Cyclopenta[b]pyrrole-2-carboxylic acid, octahydro-1-[(2S)-2-[[[(1S)-1-[[2-[[2-(nitrooxy)ethyl]thio]ethoxy]carbonyl]-3-phenylpropyl]amino]-1-oxopropyl]- (9CI) (CA INDEX NAME)

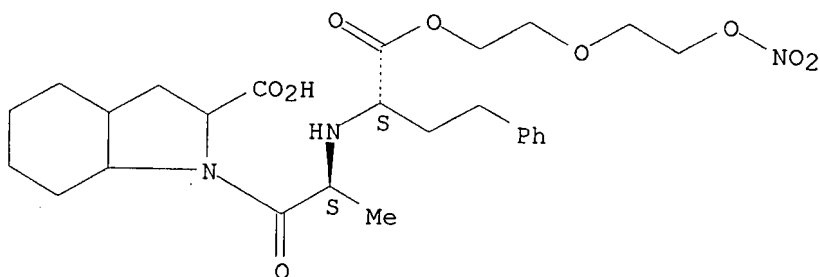
Absolute stereochemistry.



RN 812682-01-2 HCAPLUS

CN 1H-Indole-2-carboxylic acid, octahydro-1-[(2S)-2-[[[(1S)-1-[[2-[[2-(nitrooxy)ethoxy]ethoxy]carbonyl]-3-phenylpropyl]amino]-1-oxopropyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

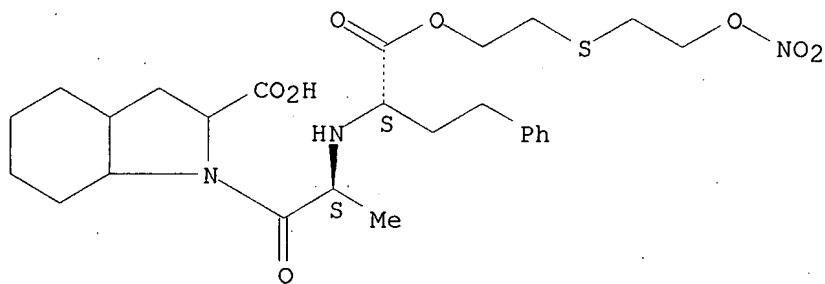


RN 812682-02-3 HCAPLUS

CN 1H-Indole-2-carboxylic acid, octahydro-1-[(2S)-2-[[[(1S)-1-[[2-[[2-(nitrooxy)ethyl]thio]ethoxy]carbonyl]-3-phenylpropyl]amino]-1-oxopropyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

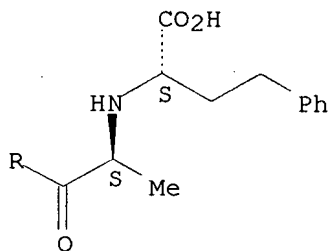
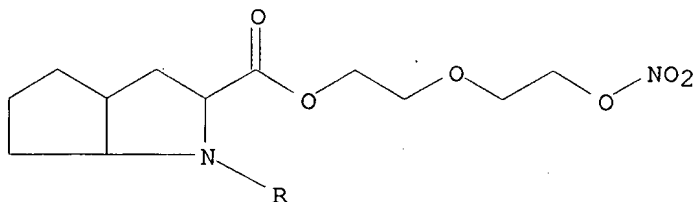




RN 812682-06-7 HCAPLUS

CN Cyclopenta[b]pyrrole-2-carboxylic acid, 1-[(2S)-2-[[[(1S)-1-carboxy-3-phenylpropyl]amino]-1-oxopropyl]octahydro-, 2-[2-[2-(nitrooxy)ethoxy]ethyl] ester (9CI) (CA INDEX NAME)

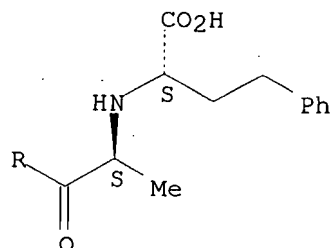
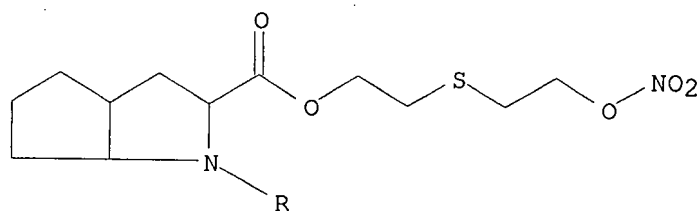
Absolute stereochemistry.



RN 812682-07-8 HCAPLUS

CN Cyclopenta[b]pyrrole-2-carboxylic acid, 1-[(2S)-2-[[[(1S)-1-carboxy-3-phenylpropyl]amino]-1-oxopropyl]octahydro-, 2-[2-[[2-(nitrooxy)ethyl]thio]ethyl] ester (9CI) (CA INDEX NAME)

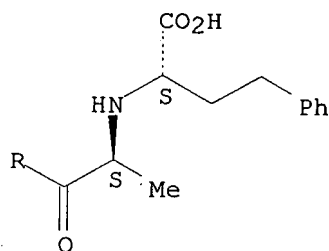
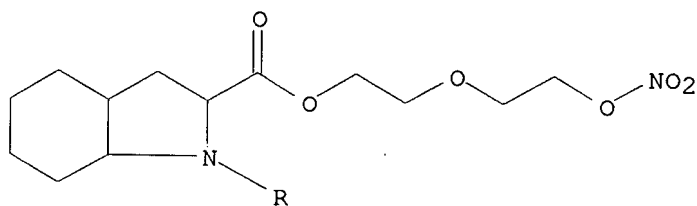
Absolute stereochemistry.



RN 812682-11-4 HCAPLUS

CN 1H-Indole-2-carboxylic acid, 1-[(2S)-2-[(1S)-1-carboxy-3-phenylpropyl]amino]-1-oxopropyl]octahydro-, 2-[2-[2-(nitrooxy)ethoxy]ethyl] ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L13 ANSWER 20 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN

IT 803728-74-7P 803728-75-8P 803728-76-9P

803728-77-0P 803728-78-1P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

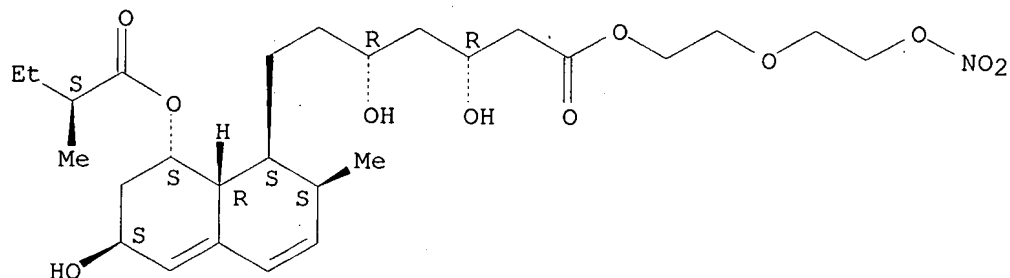
(claimed compound; preparation of nitrooxy derivs. of fluvastatin, pravastatin, cerivastatin, atorvastatin and rosuvastatin as

cholesterol-reducing agents with improved anti-inflammatory, antithrombotic and anti-platelet activity)

RN 803728-74-7 HCAPLUS

CN 1-Naphthaleneheptanoic acid, 1,2,6,7,8,8a-hexahydro- $\beta$ ,8,6-trihydroxy-2-methyl-8-[(2S)-2-methyl-1-oxobutoxy]-, 2-[2-(nitrooxy)ethoxy]ethyl ester, ( $\beta$ R,8R,1S,2S,6S,8S,8aR)- (9CI)  
(CA INDEX NAME)

Absolute stereochemistry.

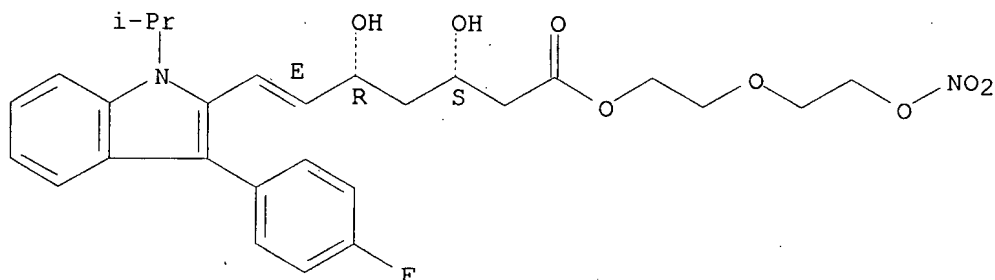


RN 803728-75-8 HCAPLUS

CN 6-Heptenoic acid, 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-, 2-[2-(nitrooxy)ethoxy]ethyl ester, (3R,5S,6E)-rel- (9CI)  
(CA INDEX NAME)

Relative stereochemistry.

Double bond geometry as shown.

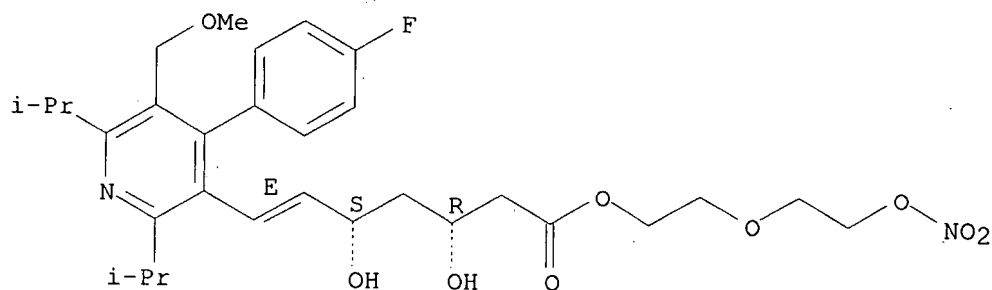


RN 803728-76-9 HCAPLUS

CN 6-Heptenoic acid, 7-[4-(4-fluorophenyl)-5-(methoxymethyl)-2,6-bis(1-methylethyl)-3-pyridinyl]-3,5-dihydroxy-, 2-[2-(nitrooxy)ethoxy]ethyl ester, (3R,5S,6E)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

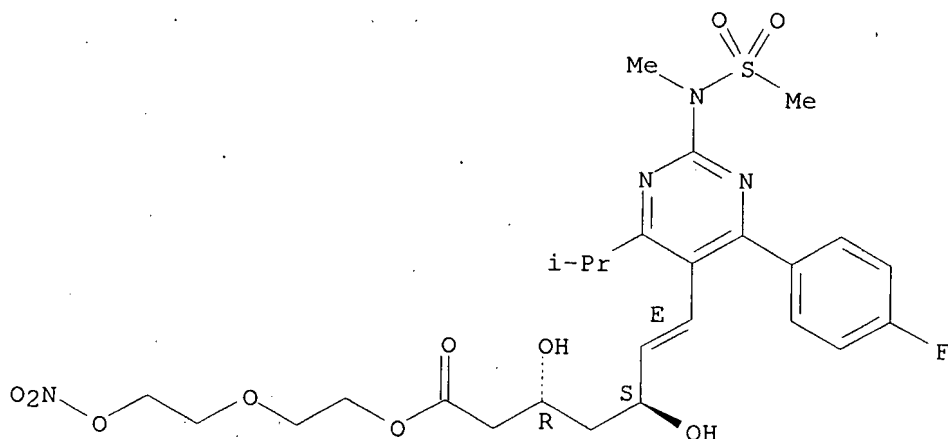
Double bond geometry as shown.



RN 803728-77-0 HCAPLUS

CN 6-Heptenoic acid, 7-[4-(4-fluorophenyl)-6-(1-methylethyl)-2-[methyl(methylsulfonyl)amino]-5-pyrimidinyl]-3,5-dihydroxy-, 2-[2-(nitrooxy)ethoxy]ethyl ester, (3R,5S,6E)- (9CI) (CA INDEX NAME)

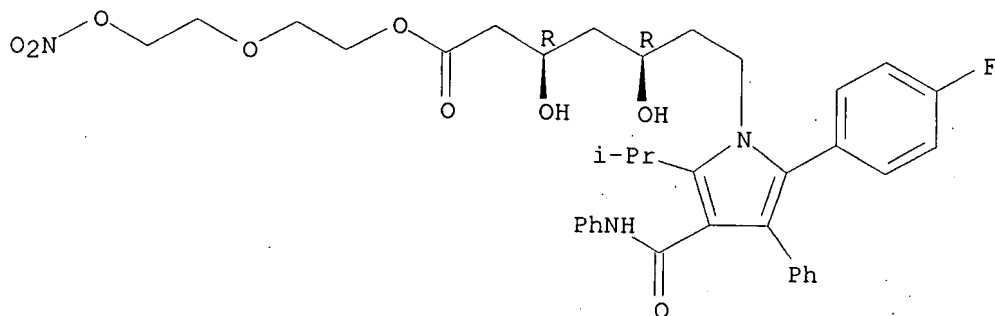
Absolute stereochemistry.  
Double bond geometry as shown.



RN 803728-78-1 HCAPLUS

CN 1H-Pyrrole-1-heptanoic acid, 2-(4-fluorophenyl)-β,δ-dihydroxy-5-(1-methylethyl)-3-phenyl-4-[(phenylamino)carbonyl]-, 2-[2-(nitrooxy)ethoxy]ethyl ester, (βR,δR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry..



L13 ANSWER 21 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN

IT 754241-98-0P 754241-99-1P 754242-00-7P

754242-02-9P

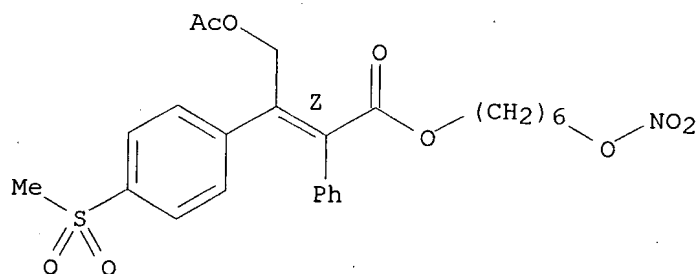
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of nitric oxide releasing prodrugs of diarylfuranones as selective COX-2 inhibitors)

RN 754241-98-0 HCAPLUS

CN Benzeneacetic acid,  $\alpha$ -[2-(acetyloxy)-1-[4-(methylsulfonyl)phenyl]ethylidene]-, 6-(nitrooxy)hexyl ester, ( $\alpha$ Z)-(9CI) (CA INDEX NAME)

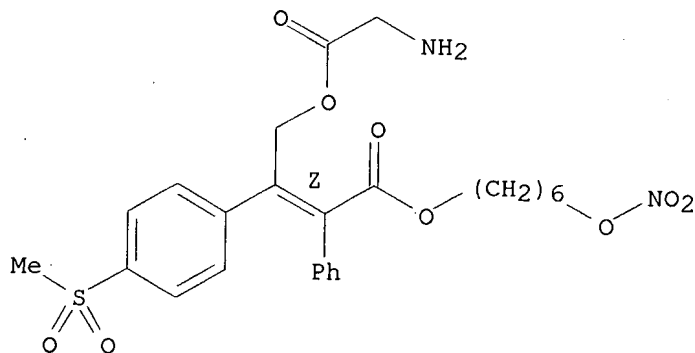
Double bond geometry as shown.



RN 754241-99-1 HCAPLUS

CN Glycine, (2Z)-2-[4-(methylsulfonyl)phenyl]-4-[[6-(nitrooxy)hexyl]oxy]-4-oxo-3-phenyl-2-butenyl ester, monohydrochloride (9CI) (CA INDEX NAME)

Double bond geometry as shown.

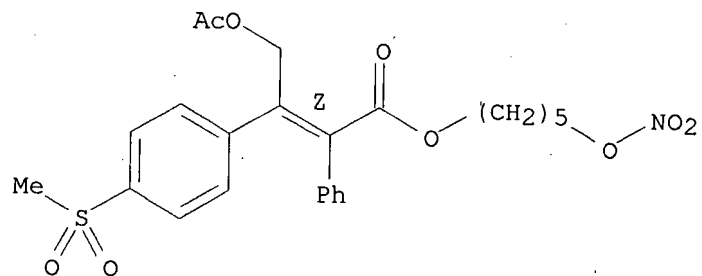


● HCl

RN 754242-00-7 HCAPLUS

CN Benzeneacetic acid,  $\alpha$ -[2-(acetyloxy)-1-[4-(methylsulfonyl)phenyl]ethylidene]-, 5-(nitrooxy)pentyl ester, ( $\alpha$ Z)-(9CI) (CA INDEX NAME)

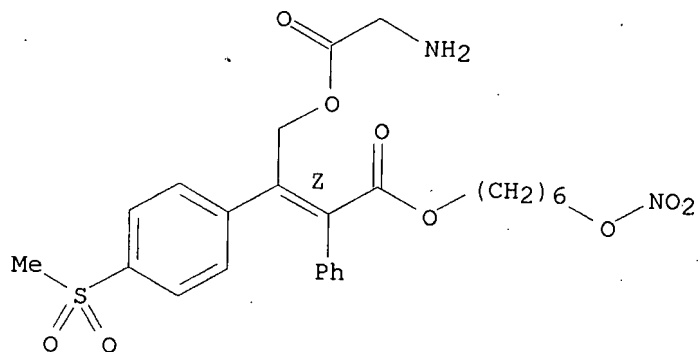
Double bond geometry as shown.



RN 754242-02-9 HCAPLUS

CN Glycine, (2Z)-2-[4-(methanesulfonyl)phenyl]-4-[[6-(nitrooxy)hexyl]oxy]-4-oxo-3-phenyl-2-butenyl ester (9CI) (CA INDEX NAME)

Double bond geometry as shown.



IT 754242-09-6P

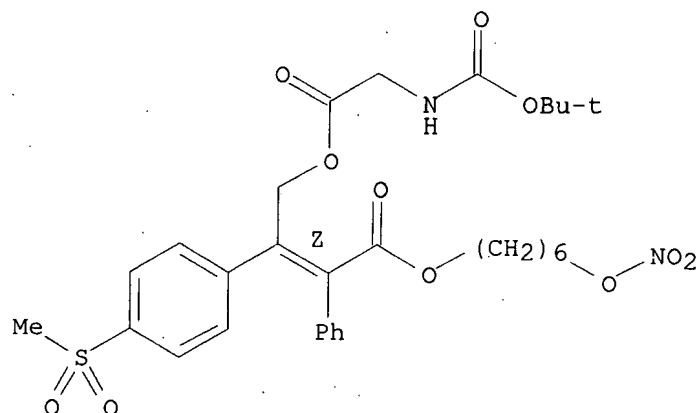
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of nitric oxide releasing prodrugs of diarylfuranones as selective COX-2 inhibitors)

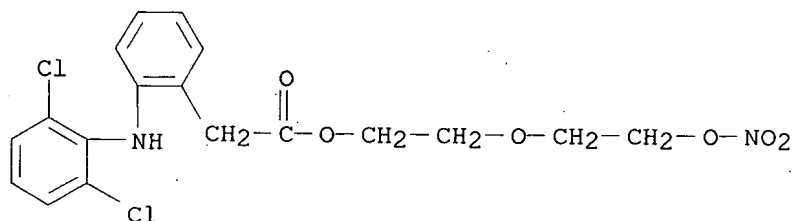
RN 754242-09-6 HCAPLUS

CN Glycine, N-[(1,1-dimethylethoxy)carbonyl]-, (2Z)-2-[4-(methanesulfonyl)phenyl]-4-[[6-(nitrooxy)hexyl]oxy]-4-oxo-3-phenyl-2-butenyl ester (9CI) (CA INDEX NAME)

Double bond geometry as shown.



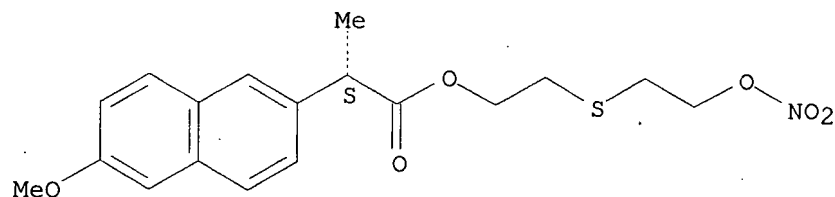
L13 ANSWER 22 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN  
 IT 174454-43-4P  
 RL: IMF (Industrial manufacture); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
 (manufacturing process for NO-donating compds. such as NO-donating diclofenac)  
 RN 174454-43-4 HCAPLUS  
 CN Benzeneacetic acid, 2-[(2,6-dichlorophenyl)amino]-, 2-[2-(nitrooxy)ethoxy]ethyl ester (CA INDEX NAME)



L13 ANSWER 23 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN  
 IT 646509-36-6P, 2-[[2-(Nitrooxy)ethyl]thio]ethyl  
 (2S)-2-(6-methoxy-2-naphthyl)propanoate 646509-38-8P,  
 2-[[2-(Nitrooxy)ethyl]sulfonyl]ethyl (2S)-2-(6-methoxy-2-naphthyl)propanoate 646509-39-9P 646510-12-5P,  
 [[[2-(Nitrooxy)ethyl]oxy]carbonyl]methyl (2S)-2-(6-methoxy-2-naphthyl)propanoate 646510-17-0P, [[[2-[[2-(Nitrooxy)ethyl]sulfonyl]ethyl]oxy]carbonyl]methyl (2S)-2-(6-methoxy-2-naphthyl)propanoate 646511-47-9P, [[[2-(Nitrooxy)ethyl]oxy]carbonyl]methyl 2-(6-methoxy-2-naphthyl)propanoate 646511-50-4P, [[[2-[[2-(Nitrooxy)ethyl]sulfonyl]ethyl]oxy]carbonyl]methyl 2-(6-methoxy-2-naphthyl)propanoate  
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (preparation of naproxen-derived nitrosated antiinflammatory compds.)  
 RN 646509-36-6 HCAPLUS  
 CN 2-Naphthaleneacetic acid, 6-methoxy- $\alpha$ -methyl-, 2-[[2-

(nitrooxy)ethyl]thio]ethyl ester, ( $\alpha$ S)- (9CI) (CA INDEX NAME)

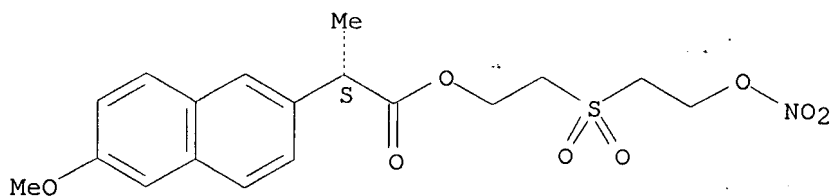
Absolute stereochemistry.



RN 646509-38-8 HCAPLUS

CN 2-Naphthaleneacetic acid, 6-methoxy- $\alpha$ -methyl-, 2-[[2-(nitrooxy)ethyl]sulfonyl]ethyl ester, ( $\alpha$ S)- (9CI) (CA INDEX NAME)

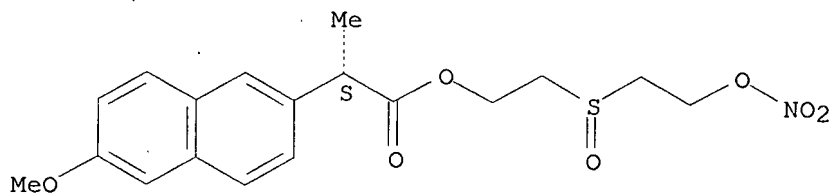
Absolute stereochemistry.



RN 646509-39-9 HCAPLUS

CN 2-Naphthaleneacetic acid, 6-methoxy- $\alpha$ -methyl-, 2-[[2-(nitrooxy)ethyl]sulfinyl]ethyl ester, ( $\alpha$ S)- (9CI) (CA INDEX NAME)

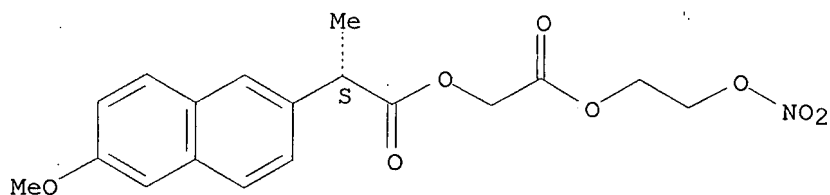
Absolute stereochemistry.



RN 646510-12-5 HCAPLUS

CN 2-Naphthaleneacetic acid, 6-methoxy- $\alpha$ -methyl-, 2-[[2-(nitrooxy)ethoxy]-2-oxoethyl ester, ( $\alpha$ S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

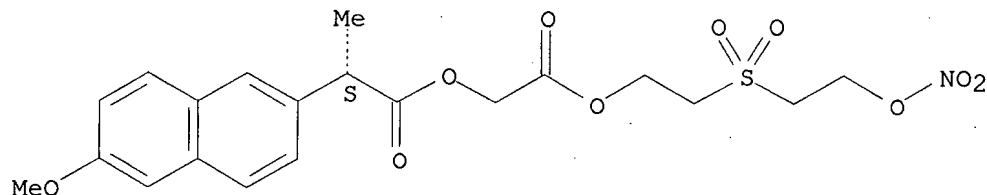




RN 646510-17-0 HCAPLUS

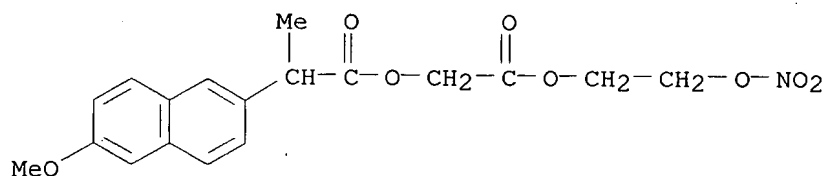
CN 2-Naphthaleneacetic acid, 6-methoxy- $\alpha$ -methyl-, 2-[2-[[2-(nitrooxy)ethyl]sulfonyl]ethoxy]-2-oxoethyl ester, ( $\alpha$ S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



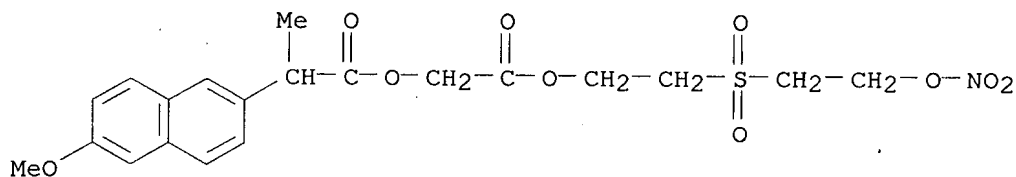
RN 646511-47-9 HCAPLUS

CN 2-Naphthaleneacetic acid, 6-methoxy- $\alpha$ -methyl-, 2-[2-(nitrooxy)ethoxy]-2-oxoethyl ester (9CI) (CA INDEX NAME)



RN 646511-50-4 HCAPLUS

CN 2-Naphthaleneacetic acid, 6-methoxy- $\alpha$ -methyl-, 2-[2-[[2-(nitrooxy)ethyl]sulfonyl]ethoxy]-2-oxoethyl ester (9CI) (CA INDEX NAME)



L13 ANSWER 24 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN

IT 174454-43-4 174454-49-0 311336-59-1

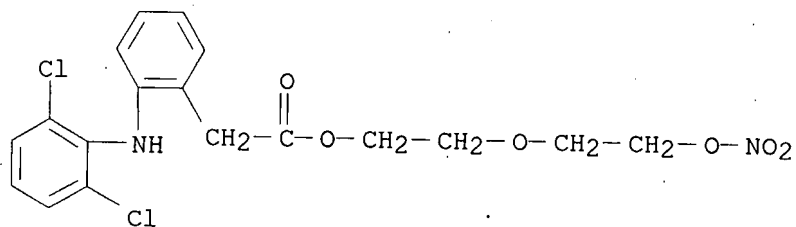
569371-19-3 639067-57-5

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(oral pharmaceutical liquid drugs containing nitrate ester NSAIDs having improved bioavailability)

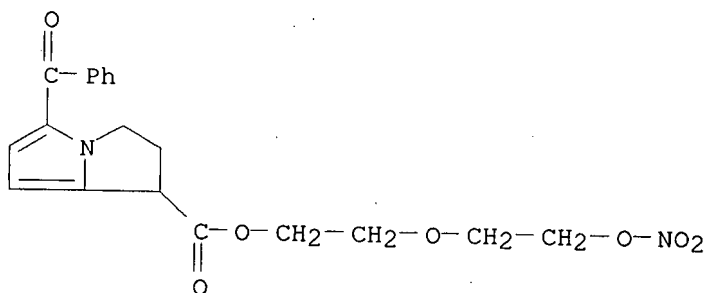
RN 174454-43-4 HCAPLUS

CN Benzeneacetic acid, 2-[(2,6-dichlorophenyl)amino]-, 2-[2-(nitrooxy)ethoxy]ethyl ester (CA INDEX NAME)



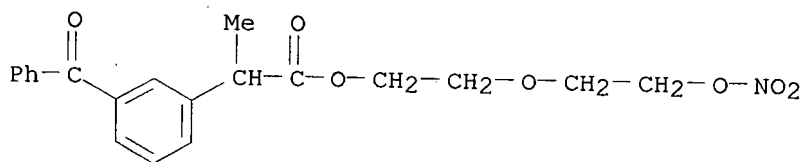
RN 174454-49-0 HCAPLUS

CN 1H-Pyrrolizine-1-carboxylic acid, 5-benzoyl-2,3-dihydro-, 2-[2-(nitrooxy)ethoxy]ethyl ester (9CI) (CA INDEX NAME)



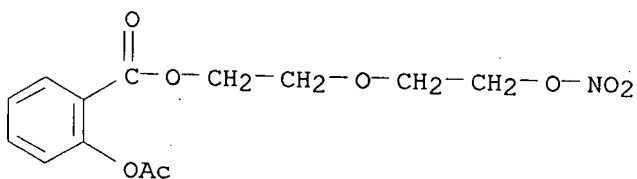
RN 311336-59-1 HCAPLUS

CN Benzeneacetic acid, 3-benzoyl-α-methyl-, 2-[2-(nitrooxy)ethoxy]ethyl ester (CA INDEX NAME)



RN 569371-19-3 HCAPLUS

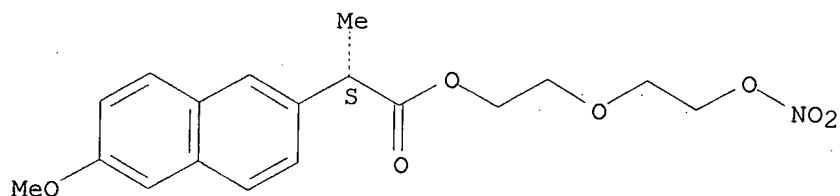
CN Benzoic acid, 2-(acetyloxy)-, 2-[2-(nitrooxy)ethoxy]ethyl ester (9CI) (CA INDEX NAME)



RN 639067-57-5 HCAPLUS

CN 2-Naphthaleneacetic acid, 6-methoxy-α-methyl-, 2-[2-(nitrooxy)ethoxy]ethyl ester, (αS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



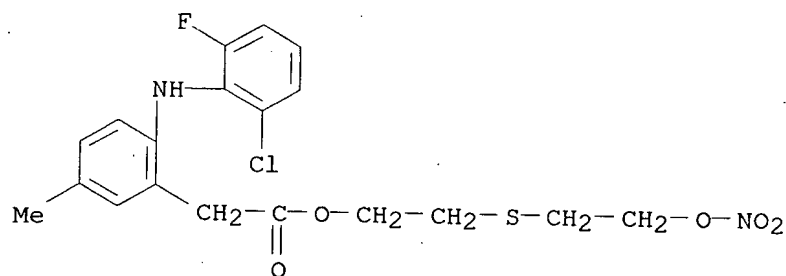
L13 ANSWER 25 OF 45 HCAPLUS. COPYRIGHT 2007 ACS on STN

IT 634878-45-8 634878-46-9 634878-50-5

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(nitrosated and/or nitrosylated cyclooxygenase-2 selective inhibitors)

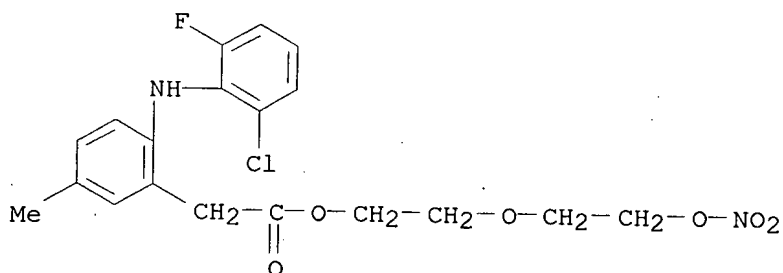
RN 634878-45-8 HCAPLUS

CN Benzeneacetic acid, 2-[(2-chloro-6-fluorophenyl)amino]-5-methyl-,  
2-[[2-(nitrooxy)ethyl]thio]ethyl ester (9CI) (CA INDEX NAME)



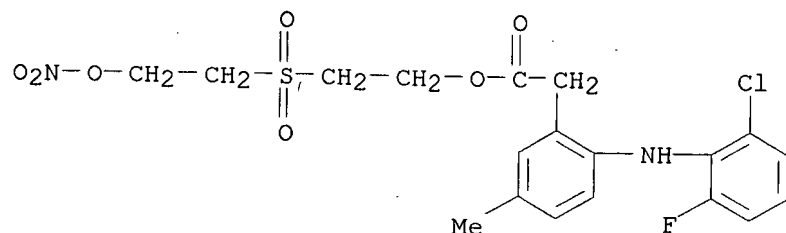
RN 634878-46-9 HCAPLUS

CN Benzeneacetic acid, 2-[(2-chloro-6-fluorophenyl)amino]-5-methyl-,  
2-[[2-(nitrooxy)ethoxy]ethyl ester (9CI) (CA INDEX NAME)

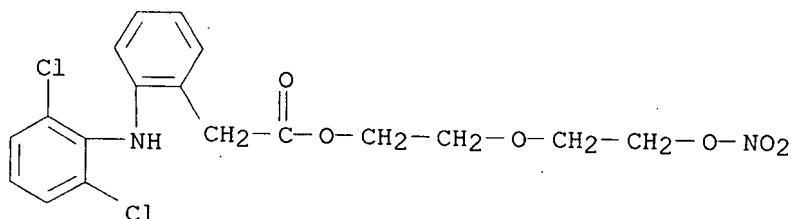


RN 634878-50-5 HCAPLUS

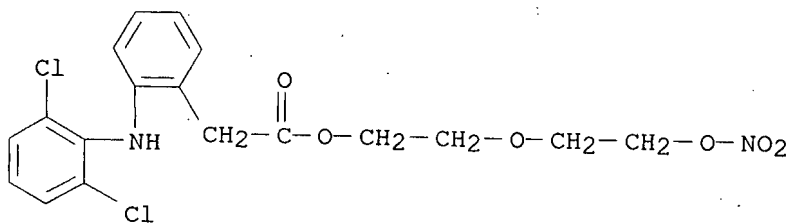
CN Benzeneacetic acid, 2-[(2-chloro-6-fluorophenyl)amino]-5-methyl-,  
2-[[2-(nitrooxy)ethyl]sulfonyl]ethyl ester (9CI) (CA INDEX NAME)



L13 ANSWER 26 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN  
 IT 174454-43-4  
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (nitrooxy derivs. of antiinflammatory/analgesic compds. for treatment of arthritis)  
 RN 174454-43-4 HCAPLUS  
 CN Benzeneacetic acid, 2-[(2,6-dichlorophenyl)amino]-, 2-[2-(nitrooxy)ethoxy]ethyl ester (CA INDEX NAME)



L13 ANSWER 27 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN  
 IT 174454-43-4  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (nitric oxide-donating NSAIDS adsorbed into carrier particles)  
 RN 174454-43-4 HCAPLUS  
 CN Benzeneacetic acid, 2-[(2,6-dichlorophenyl)amino]-, 2-[2-(nitrooxy)ethoxy]ethyl ester (CA INDEX NAME)



L13 ANSWER 28 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN  
 IT 586350-46-1P  
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

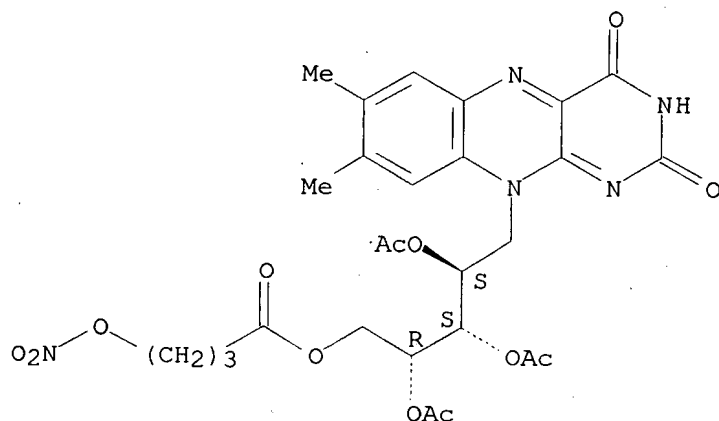
(Uses)

(preparation of nitrate prodrugs for treating or preventing inflammatory, ischemic, degenerative, and proliferative diseases)

RN 586350-46-1 HCAPLUS

CN Riboflavin, 2',3',4'-triacetate 5'-[4-(nitrooxy)butanoate] (9CI) (CA INDEX NAME)

Absolute stereochemistry.



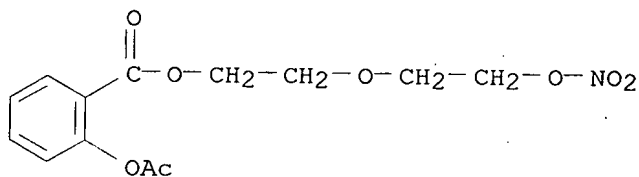
L13 ANSWER 29 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN

IT 569371-19-3, NCX 4018

RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (nitric oxide-donating non-steroidal anti-inflammatory drugs)

RN 569371-19-3 HCAPLUS

CN Benzoic acid, 2-(acetyloxy)-, 2-[2-(nitrooxy)ethoxy]ethyl ester (9CI) (CA INDEX NAME)



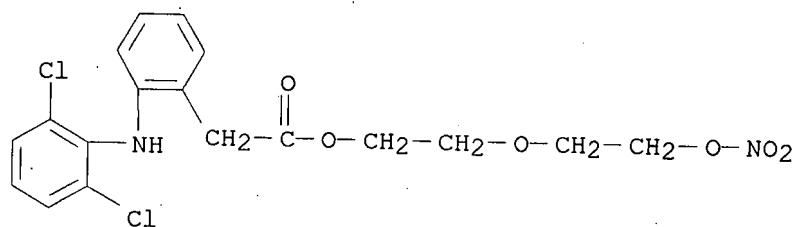
L13 ANSWER 30 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN

IT 174454-43-4 311336-59-1

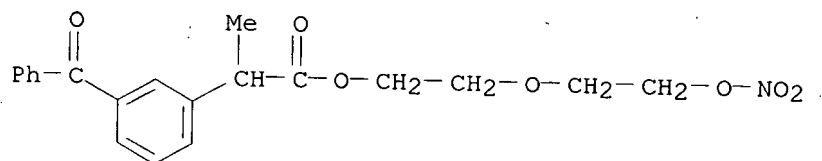
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (self emulsifying drug delivery system containing NSAIDs)

RN 174454-43-4 HCAPLUS

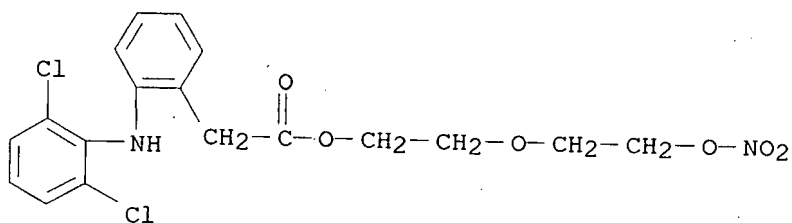
CN Benzeneacetic acid, 2-[(2,6-dichlorophenyl)amino]-, 2-[2-(nitrooxy)ethoxy]ethyl ester (CA INDEX NAME)



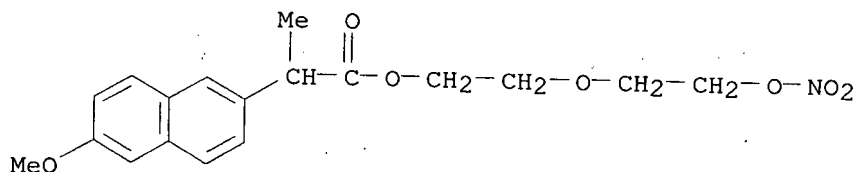
RN 311336-59-1 HCAPLUS  
 CN Benzeneacetic acid, 3-benzoyl- $\alpha$ -methyl-, 2-[2-(nitrooxy)ethoxy]ethyl ester (CA INDEX NAME)



L13 ANSWER 31 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN  
 IT 174454-43-4 174454-51-4 311336-59-1  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (pharmaceutical compns. containing NO-releasing NSAID and surfactants)  
 RN 174454-43-4 HCAPLUS  
 CN Benzeneacetic acid, 2-[(2,6-dichlorophenyl)amino]-, 2-[2-(nitrooxy)ethoxy]ethyl ester (CA INDEX NAME)



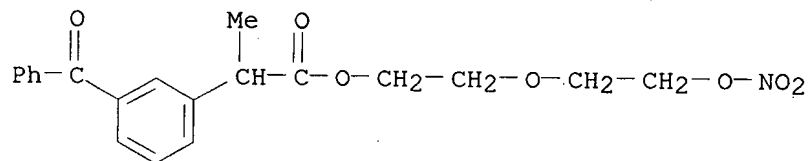
RN 174454-51-4 HCAPLUS  
 CN 2-Naphthaleneacetic acid, 6-methoxy- $\alpha$ -methyl-, 2-[2-(nitrooxy)ethoxy]ethyl ester (CA INDEX NAME)



RN 311336-59-1 HCAPLUS

10/522986 NITROOXYALKYL SUBTD ESTERS

CN Benzeneacetic acid, 3-benzoyl- $\alpha$ -methyl-, 2-[2-(nitrooxy)ethoxy]ethyl ester (CA INDEX NAME)



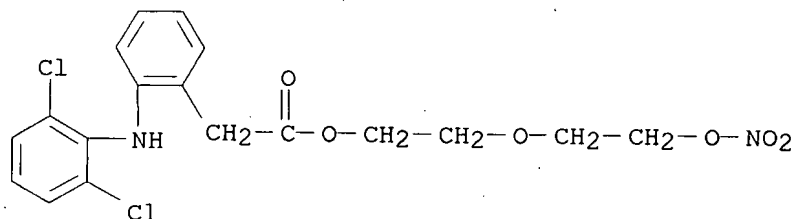
L13 ANSWER 32 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN

IT 174454-43-4 174454-51-4 311336-59-1

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(self emulsifying drug delivery system)

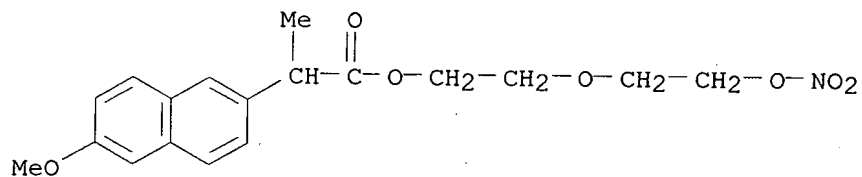
RN 174454-43-4 HCAPLUS

CN Benzeneacetic acid, 2-[(2,6-dichlorophenyl)amino]-, 2-[2-(nitrooxy)ethoxy]ethyl ester (CA INDEX NAME)



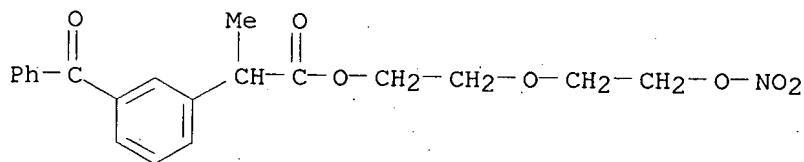
RN 174454-51-4 HCAPLUS

CN 2-Naphthaleneacetic acid, 6-methoxy- $\alpha$ -methyl-, 2-[2-(nitrooxy)ethoxy]ethyl ester (CA INDEX NAME)



RN 311336-59-1 HCAPLUS

CN Benzeneacetic acid, 3-benzoyl- $\alpha$ -methyl-, 2-[2-(nitrooxy)ethoxy]ethyl ester (CA INDEX NAME)



L13 ANSWER 33 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN

IT 326850-35-5P 326850-41-3P 326850-45-7P

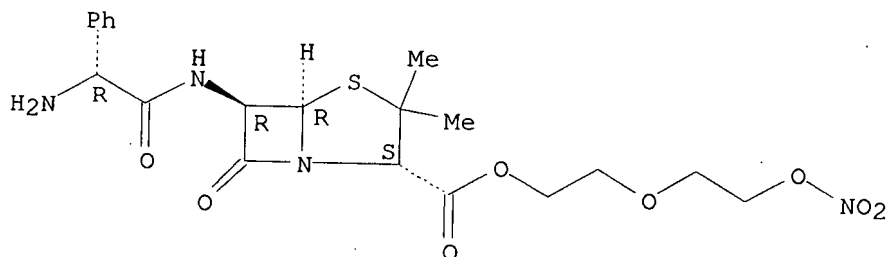
RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(synthesis, activity and formulations of pharmaceutical compds. for treatment of oxidative stress and/or endothelial dysfunction)

RN 326850-35-5 HCAPLUS

CN 4-Thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid, 6-[[ (2R)-aminophenylacetyl]amino]-3,3-dimethyl-7-oxo-, 2-[2-(nitrooxy)ethoxy]ethyl ester, (2S,5R,6R)- (9CI) (CA INDEX NAME)

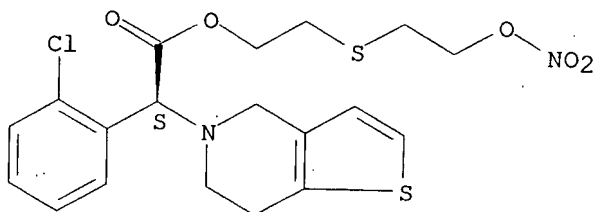
Absolute stereochemistry.



RN 326850-41-3 HCAPLUS

CN Thieno[3,2-c]pyridine-5(4H)-acetic acid,  $\alpha$ -(2-chlorophenyl)-6,7-dihydro-, 2-[[2-(nitrooxy)ethyl]thio]ethyl ester, ( $\alpha$ S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

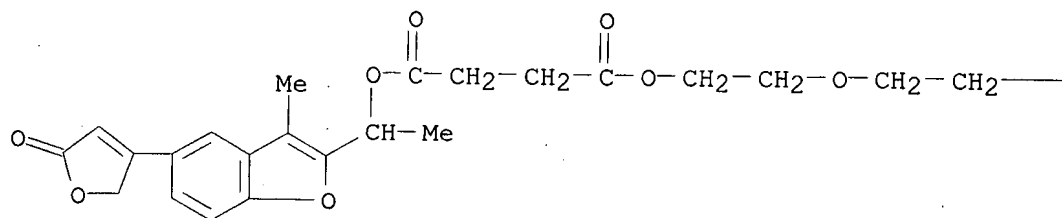


RN 326850-45-7 HCAPLUS

CN Butanedioic acid, 1-[5-(2,5-dihydro-5-oxo-3-furanyl)-3-methyl-2-benzofuranyl]ethyl 2-[2-(nitrooxy)ethoxy]ethyl ester (9CI) (CA INDEX NAME)



PAGE 1-A



PAGE 1-B

—O—NO<sub>2</sub>

IT 326850-53-7P

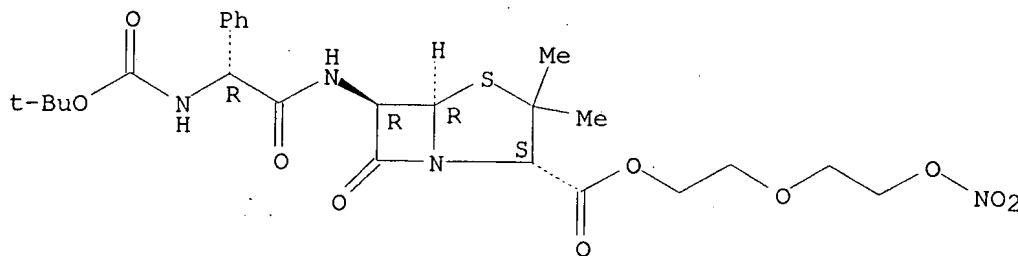
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(synthesis, activity and formulations of pharmaceutical compds. for treatment of oxidative stress and/or endothelial dysfunction)

RN 326850-53-7 HCAPLUS

CN 4-Thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid, 6-[[[(2R)-[[[(1,1-dimethylethoxy)carbonyl]amino]phenylacetyl]amino]-3,3-dimethyl-7-oxo-, 2-[2-(nitrooxy)ethoxy]ethyl ester, (2S,5R,6R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L13 ANSWER 34 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN

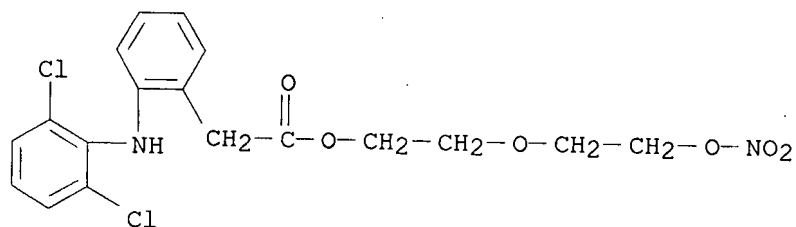
IT 174454-43-4 174454-51-4 311336-59-1

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(treatment of Helicobacter pylori infections with nitric oxide-releasing NSAIDs and proton pump inhibitors)

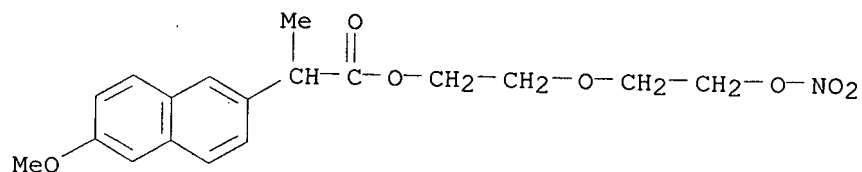
RN 174454-43-4 HCAPLUS

CN Benzeneacetic acid, 2-[(2,6-dichlorophenyl)amino]-, 2-[2-(nitrooxy)ethoxy]ethyl ester (CA INDEX NAME)



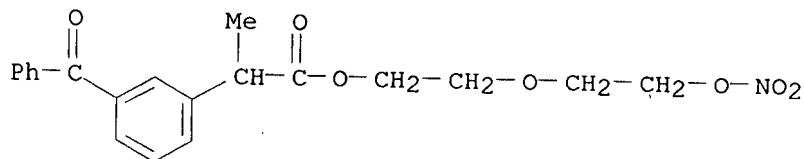
RN 174454-51-4 HCAPLUS

CN 2-Naphthaleneacetic acid, 6-methoxy- $\alpha$ -methyl-, 2-[2-(nitrooxy)ethoxy]ethyl ester (CA INDEX NAME)



RN 311336-59-1 HCAPLUS

CN Benzeneacetic acid, 3-benzoyl- $\alpha$ -methyl-, 2-[2-(nitrooxy)ethoxy]ethyl ester (CA INDEX NAME)



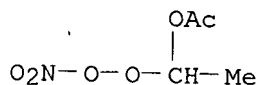
L13 ANSWER 35 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN

IT 158475-26-4

RL: POL (Pollutant); PRP (Properties); OCCU (Occurrence)  
(atmospheric thermal stability of peroxy nitrates)

RN 158475-26-4 HCAPLUS

CN Peroxynitric acid, 1-(acetyloxy)ethyl ester (9CI) (CA INDEX NAME)



L13 ANSWER 36 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN

IT 183195-04-2P, 183195-06-4P, 183195-07-5P

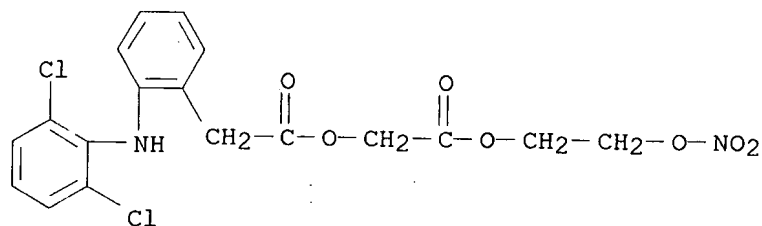
RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP  
(Preparation)

(preparation of nitric esters of 2-(2,6-dihalophenylamino)phenylacetoxycetic acid derivs.)

10/522986 NITROOXYALKYL SUBTD ESTERS

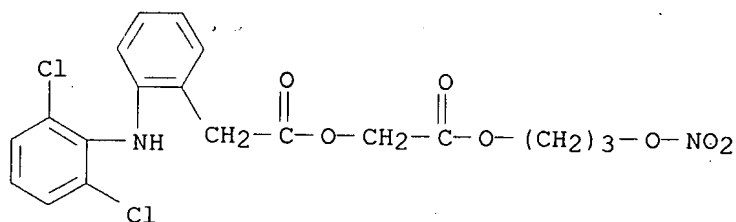
RN 183195-04-2 HCAPLUS

CN Benzeneacetic acid, 2-[(2,6-dichlorophenyl)amino]-, 2-[2-(nitrooxy)ethoxy]-2-oxoethyl ester (9CI) (CA INDEX NAME)



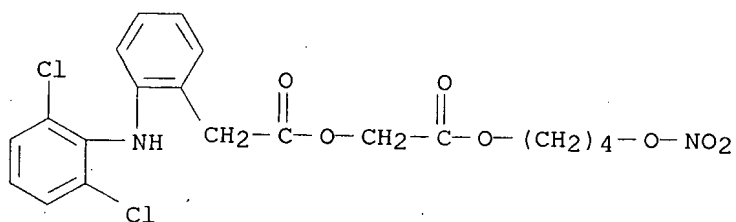
RN 183195-06-4 HCAPLUS

CN Benzeneacetic acid, 2-[(2,6-dichlorophenyl)amino]-, 2-[3-(nitrooxy)propoxy]-2-oxoethyl ester (9CI) (CA INDEX NAME)



RN 183195-07-5 HCAPLUS

CN Benzeneacetic acid, 2-[(2,6-dichlorophenyl)amino]-, 2-[4-(nitrooxy)butoxy]-2-oxoethyl ester (9CI) (CA INDEX NAME)



L13 ANSWER 37 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN

IT 174454-43-4P 174454-48-9P 174454-49-0P

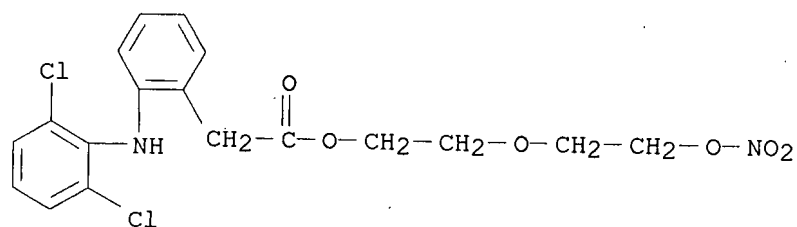
174454-50-3P 174454-51-4P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of aryl nitrate ester compds. having antiinflammatory and as well as analgesic and antithrombotic activities)

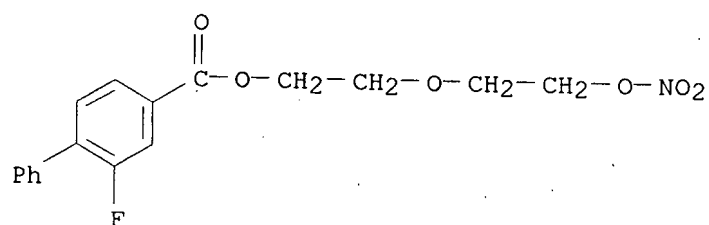
RN 174454-43-4 HCAPLUS

CN Benzeneacetic acid, 2-[(2,6-dichlorophenyl)amino]-, 2-[2-(nitrooxy)ethoxy]ethyl ester (CA INDEX NAME)



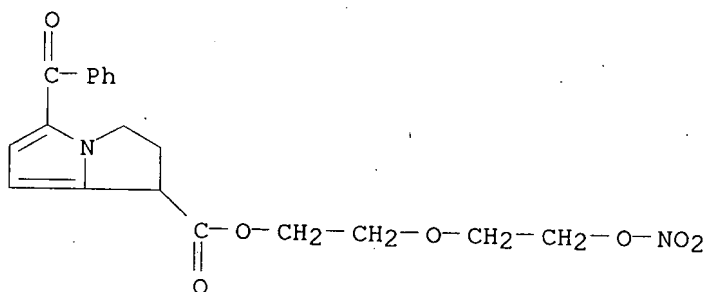
RN 174454-48-9 HCAPLUS

CN [1,1'-Biphenyl]-4-carboxylic acid, 2-fluoro-, 2-[2-(nitrooxy)ethoxy]ethyl ester (9CI) (CA INDEX NAME)



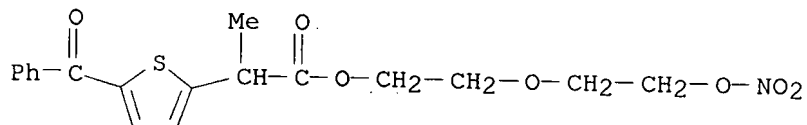
RN 174454-49-0 HCAPLUS

CN 1H-Pyrrolizine-1-carboxylic acid, 5-benzoyl-2,3-dihydro-, 2-[2-(nitrooxy)ethoxy]ethyl ester (9CI) (CA INDEX NAME)



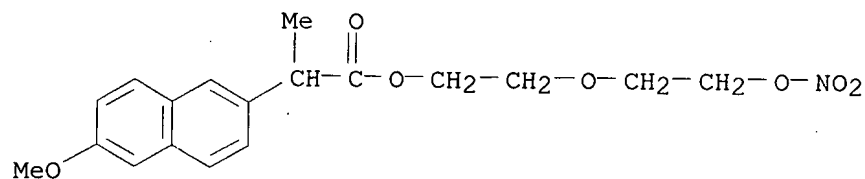
RN 174454-50-3 HCAPLUS

CN 2-Thiopheneacetic acid, 5-benzoyl-α-methyl-, 2-[2-(nitrooxy)ethoxy]ethyl ester (9CI) (CA INDEX NAME)

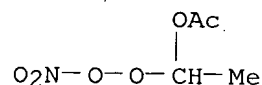


RN 174454-51-4 HCAPLUS

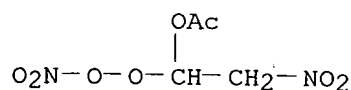
CN 2-Naphthaleneacetic acid, 6-methoxy- $\alpha$ -methyl-, 2-[2-(nitrooxy)ethoxy]ethyl ester (CA INDEX NAME)



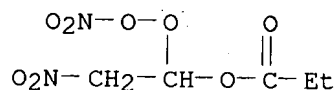
L13 ANSWER 38 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN  
 IT 158475-26-4, 1-Acetoxyethyl peroxyxynitrate  
 RL: PRP (Properties); RCT (Reactant); RACT (Reactant or reagent)  
 (thermolysis kinetics of)  
 RN 158475-26-4 HCAPLUS  
 CN Peroxynitric acid, 1-(acetyloxy)ethyl ester (9CI) (CA INDEX NAME)



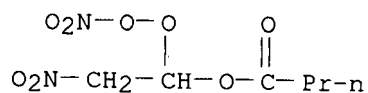
L13 ANSWER 39 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN  
 IT 87055-56-9P 87055-57-0P  
 RL: RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)  
 (formation and alcoholysis of)  
 RN 87055-56-9 HCAPLUS  
 CN Peroxynitric acid, 1-(acetyloxy)-2-nitroethyl ester (9CI) (CA INDEX NAME)



RN 87055-57-0 HCAPLUS  
 CN Peroxynitric acid, 2-nitro-1-(1-oxopropoxy)ethyl ester (9CI) (CA INDEX NAME)



IT 87055-58-1P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (preparation and alcoholysis of)  
 RN 87055-58-1 HCAPLUS  
 CN Butanoic acid, 2-nitro-1-(nitrodioxy)ethyl ester (9CI) (CA INDEX NAME)



L13 ANSWER 40 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN

IT 39128-70-6P 39128-72-8P 39128-73-9P

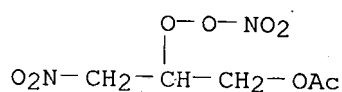
39128-74-0P 39128-75-1P 39128-76-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and reduction of)

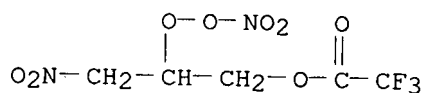
RN 39128-70-6 HCAPLUS

CN Peroxynitric acid, 1-[(acetyloxy)methyl]-2-nitroethyl ester (9CI) (CA INDEX NAME)



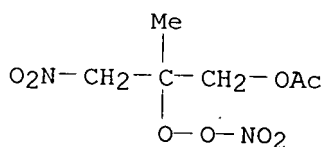
RN 39128-72-8 HCAPLUS

CN Acetic acid, trifluoro-, 3-nitro-2-(nitrodioxy)propyl ester (9CI) (CA INDEX NAME)



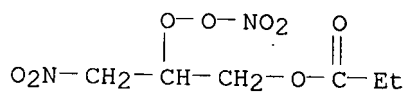
RN 39128-73-9 HCAPLUS

CN Peroxynitric acid, 1-[(acetyloxy)methyl]-1-methyl-2-nitroethyl ester (9CI) (CA INDEX NAME)



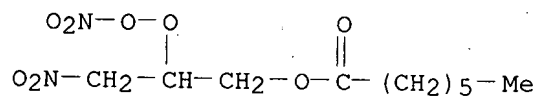
RN 39128-74-0 HCAPLUS

CN Peroxynitric acid, 1-(nitromethyl)-2-(1-oxopropoxy)ethyl ester (9CI) (CA INDEX NAME)



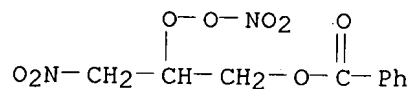
RN 39128-75-1 HCAPLUS

CN Heptanoic acid, 3-nitro-2-(nitrodioxy)propyl ester (9CI) (CA INDEX NAME)



RN 39128-76-2 HCAPLUS

CN Peroxynitric acid, 1-[(benzoyloxy)methyl]-2-nitroethyl ester (9CI) (CA INDEX NAME)



L13 ANSWER 41 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN

IT 51729-40-9

RL: USES (Uses)

(propellants, with smoldering and combustive action for pulsed combustion)

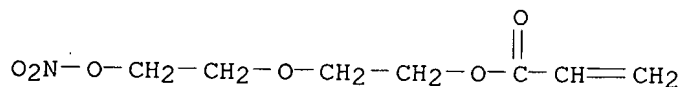
RN 51729-40-9 HCAPLUS

CN 2-Propenoic acid, butyl ester, polymer with ethenylbenzene and 2-[2-(nitrooxy)ethoxy]ethyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 51729-39-6

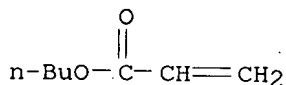
CMF C7 H11 N O6



CM 2

CRN 141-32-2

CMF C7 H12 O2

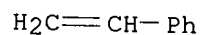


CM 3

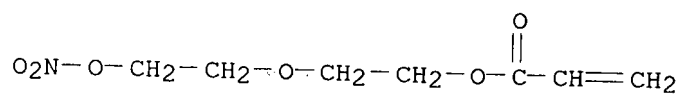
CRN 100-42-5

CMF C8 H8

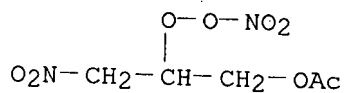
10/522986 NITROOXYALKYL SUBTD ESTERS



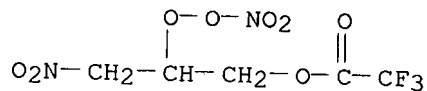
L13 ANSWER 42 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN  
 IT 51960-78-2  
 RL: USES (Uses)  
 (propellants, pulsating)  
 RN 51960-78-2 HCAPLUS  
 CN 2-Propenoic acid, 2-[2-(nitrooxy)ethoxy]ethyl ester, homopolymer (9CI)  
 (CA INDEX NAME)  
 CM 1  
 CRN 51729-39-6  
 CMF C7 H11 N O6



L13 ANSWER 43 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN  
 IT 39128-70-6 39128-72-8 39128-73-9  
 39128-74-0 39128-75-1 39128-76-2  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reaction of, with nitrogen oxide)  
 RN 39128-70-6 HCAPLUS  
 CN Peroxynitric acid, 1-[(acetyloxy)methyl]-2-nitroethyl ester (9CI) (CA  
 INDEX NAME)

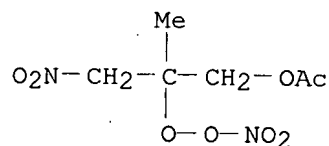


RN 39128-72-8 HCAPLUS  
 CN Acetic acid, trifluoro-, 3-nitro-2-(nitrodioxy)propyl ester (9CI) (CA  
 INDEX NAME)



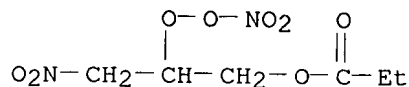
RN 39128-73-9 HCAPLUS  
 CN Peroxynitric acid, 1-[(acetyloxy)methyl]-1-methyl-2-nitroethyl ester (9CI)  
 (CA INDEX NAME)





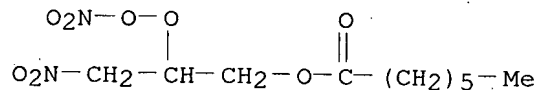
RN 39128-74-0 HCAPLUS

CN Peroxynitric acid, 1-(nitromethyl)-2-(1-oxopropoxy)ethyl ester (9CI) (CA INDEX NAME)



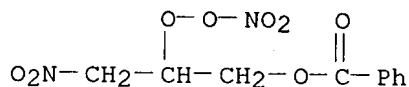
RN 39128-75-1 HCAPLUS

CN Heptanoic acid, 3-nitro-2-(nitrodioxy)propyl ester (9CI) (CA INDEX NAME)



RN 39128-76-2 HCAPLUS

CN Peroxynitric acid, 1-[(benzoyloxy)methyl]-2-nitroethyl ester (9CI) (CA INDEX NAME)



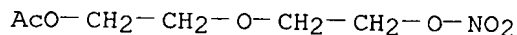
L13 ANSWER 44 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN

IT 119247-83-5

(Derived from data in the 6th Collective Formula Index (1957-1961))

RN 119247-83-5 HCAPLUS

CN Diethylene glycol, acetate, nitrate (6CI) (CA INDEX NAME)



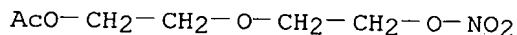
L13 ANSWER 45 OF 45 HCAPLUS COPYRIGHT 2007 ACS on STN

IT 119247-83-5

(Derived from data in the 6th Collective Formula Index (1957-1961))

RN 119247-83-5 HCAPLUS

CN Diethylene glycol, acetate, nitrate (6CI) (CA INDEX NAME)



10/522986 NITROOXYALKYL SUBTD ESTERS

=> fil stng

COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
260.25	929.76

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE	TOTAL
ENTRY	SESSION
-35.10	-35.10

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FILE 'STNGUIDE' ENTERED AT 22:04:42 ON 20 SEP 2007  
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FILE CONTAINS CURRENT INFORMATION.

LAST RELOADED: Sep 14, 2007 (20070914/UP).

=> d his

(FILE 'HOME' ENTERED AT 21:58:13 ON 20 SEP 2007)

FILE 'REGISTRY' ENTERED AT 21:58:34 ON 20 SEP 2007

L1	STRUCTURE UPLOADED
L2	15 S L1
L3	274 S L1 SSS FULL
L4	STRUCTURE UPLOADED
L5	1 S L4
L6	3 S L4 SSS FULL
L7	0 S L3 SUB=L6 FULL
L8	STRUCTURE UPLOADED
L9	0 S L8
L10	2 S L8 SSS FULL
L11	0 S L3 SUB=L10 FULL
L12	0 S L10 SUB=L3 FULL

FILE 'HCAPLUS' ENTERED AT 22:02:54 ON 20 SEP 2007

L13 45 S L3

FILE 'STNGUIDE' ENTERED AT 22:04:42 ON 20 SEP 2007